TECHNOLOGY DEPT

A National Newspaper for Every Branch of the Industry

Automotive Daily News

PASSENGER TRUCK PARTS, SHOP EQUIPMENT TIRES ACCESSORIES

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UPWARD TREND IN EMPLOYMENT SEEN IN REPORTS

Car, Accessories, Tire Plants Have Large Output Volume

Special from A. D. N. Washington Bureau

WASHINGTON, Jan. 17.—Industrial employment generally held up extremely well during the latter part of the old year, and with the advent of 1929 there was every indication that January will witness the beginning of an upward trend surpassing the same period of last year.

Such is the analysis of reports reaching the United States Employment Service of the Department of Labor today from various sections of the country.

Automobile factories and tire and accessories plants report a large volume of production, with big forces employed.

There was some decrease in activity as a number of the larger factories were undergoing preparations for new models during December. Plants manufacturing motor trucks, however, had an entirely satisfactory volume of employment.

In the Detroit industrial district several accessories plants were closed temporarily, which is usual at this time of year, the report points out. For a short period part-time schedules in two large automobile factories in Flint resulted in a small surplus of factory labor.

Six manufacturing plants in Jackson worked overtime, involving 3,800 employees during part of December. Automobile factories in Lansing were in operation with their usual forces em-

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New Title Chosen For 500-Mile Race On Memorial Day

Washington, D. C., Jan. 17.—The annual 500-mile Memorial Day race on the Indianapolis Speedway, which since 1911 has been the most colorful event in the world of automobile racing, will henceforth be titled the Grand Prize of America.

This announcement was made today by the contest board of the American Automobile Association, the official governing body of racing, which voted at its annual meeting in New York last week to award this high honor to the Indianapolis classic, which has always been run under A. A. A. sanction.

The American Automobile Association also announced that it will award a suitable permanent challenge trophy to the winners of future races on Memorial Day.

AUTO-LITE STARTS FORD ORDER DELIVERY FEB. 1

Toledo, Jan. 17. — The Electric Auto-Lite Company will start delivery on February 1 of the 1,000,000 generators to be supplied this year to the Ford Motor Company.

Output will start at 1,000 on that date and is to be increased 250 daily until a daily production schedule of 4,000 is reached.

GIRARD HAMMOND, who has just joined the Dunlop Tire and Rubber Company as general sales manager.

Girard Hammond Named Sales Chief Of Dunlop Tire Co.

Buffalo, N. Y., Jan. 17.—Announcement is made of the appointment of Girard Hammond as general sales manager of the Dunlop Tire and Rubber Company. To assume his new position Mr. Hammond leaves the advertising organization of Batten, Barton, Durstine & Osborn, Inc., New York, where he has been an executive and one of the owners.

A graduate of Cornell University, Mr. Hammond has made a notable record in marketing work. At the age of 26 he became the leader of over 200 salesmen as sales manager of the Dairymen's League of New York state.

His experience has also included executive work in newspaper publishing and in magazine publishing.

"We are tremendously sorry to lose Mr. Hammond," said Alex Osborn of Batten, Barton, Durstine & Osborn, "although we are glad he is going to Dunlop. In five years Dunlop has already become one of the leading tire companies of the United States, and in my opinion within the next five years it will make tremendous strides. Out of hundreds of men we have had in our organization I have known of no one else to go ahead as fast as Mr. Hammond. I anticipate that he will be able to contribute largely to the increased success of Dunlop."

Mr. Hammond assumes his new duties immediately.

AMERICAN BOSCH ENDS 1928 FREE OF DEBT

Springfield, Mass., Jan. 17.—The American Bosch Magneto ended 1928 completely free of debt and its only bills payable were for materials shipped in the last ten days of December and it is discounting all bills, according to officials. The past year was the best since 1922, and earnings after all charges totaled around $1,000,000, approximately $5 a share on the 207,300 shares of no par value outstanding.

GARDNER GETS BIG ORDER FOR HEARSES, AMBULANCES

St. Louis, Jan. 17.—Gardner Motor Company will build in excess of 200 hearses and ambulances during 1929 for the St. Louis Coffin Company, compared to less than 106 during 1928.

F. J. Haynes Elected Head of Durant Motors, Inc.; Former Dodge Executives in Control

NEW YORK, Jan. 17.—W. C. Durant today announced the group of executives he had previously said would assume full management of Durant Motors, Inc. The announcement followed a meeting of the board of directors of Durant, at which Fred J. Haynes, formerly president and chairman of the board of Dodge Brothers, was elected president of Durant Motors, Inc.

This election was foreshadowed many weeks ago in the Automotive Daily News and again earlier this week in an unconfirmed but apparently authentic report.

Ralph A. Vail, former director of engineering and production of Dodge Brothers, was named vice-president in charge of engineering and production. John A. Nichols, Jr., former vice-president in charge of sales of Dodge Brothers, is the newly elected secretary-treasurer.

The revised board of directors includes W. C. Durant, F. J. Haynes, Roy D. Kerby, A. H. Henniger, Ralph A. Vail, John A. Nichols, Jr., R. T. Hodgkins and George Harrison Phelps.

Mr. Durant had previously announced the appointment of Mr. Hodgkins as general sales manager.

Mr. Phelps was director of advertising of Dodge Brothers during that company's early years. Seven years ago Mr. Phelps established his own agency, continuing to handle all Dodge Brothers advertising throughout the world. George Har-

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FRED J. HAYNES

S.A.E. Sessions Deal With Engine Study and Chassis

Special from A. D. N. Detroit Bureau

DETROIT, Jan. 17.—Engine research featured the morning sessions of the annual Society of Automotive Engineers' meeting here today, with Alex Taub in the chair. The afternoon program included a discussion of chassis, under the chairmanship of Earl Gunn.

Papers at the morning meeting were read by W. T. Donkin and H. H. Clark, Cleveland Wire Spring Company; Ferdinand Jehle and W. R. Spiller, White Motor Company; Robert Janeway, consulting engineer, and K. J. De Juhasz, Pennsylvania State College. There were prepared discussions on valve mechanisms and on indicator card interpretation, presented by W. A. Scholey, Cook Spring Company; E. W. Steart, William D. Gibson Company; C. P. Nelson and L. A. Young Industries, Inc., and C. Fayette Taylor, Massachusetts Institute of Technology.

In the afternoon a joint paper by J. G. Vincent, Packard, and W. R. Griswold, also of Packard, was presented. Other papers were read by F. F. Kishline, Graham-Paige, and W. S. James, Studebaker. J. M. Nickelsen, University of Michigan, presented a progress report on the work of the research sub-committee on front wheel alignment. Prepared discussion on the Vincent-Griswold paper was given by H. A. Huebotter and on the Kishline paper by W. C. Keys, United States Rubber Company.

There was a largely attended meeting at the Chrysler engineering laboratory in the evening.

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M.E.A. Committees Planning Extensive Program for 1929

New York, Jan. 17.—Aggressive work in sales development, credit interchange and co-operation with other organizations in promotion of motor transportation and the automotive trade is announced for 1929 by committees and officers of the Motor and Equipment Association.

The executive committee, under the chairmanship of N. H. Boynton of the National Lamp Works, president of the M. E. A., recently met here, and another session was that of the sales development committee, headed by T. W. Whipple of Whipple's, Binghamton, N. Y., wholesaler.

The 1929 program of the association is well under way under the general direction of M. L. Heminway, managing director, with B. W. Ruark as assistant managing director. Mr. Ruark will give particular attention to membership work, serving as secretary of the membership committee, of which H. D. Howard of the Massey Hardware Company, Wichita, Kan., wholesaler, was appointed chairman. The

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WILLIAMS GIVES FURTHER DETAILS OF ROOSEVELT 8

Power, Safety and Comfort Featured; Under $1,000

INDIANAPOLIS, IND., Jan. 17.—Further details of the Roosevelt, a new 70-horse power straight eight, to sell for less than $1,000, which was announced some time ago in the Automotive Daily News by the Marmon Motor Car Company, are released today by G. M. Williams, president.

The new car has already been put into production and shipments to dealers will be started in the near future. The Roosevelt made its first appearance in New York during the National Show last week at a private showing held at the Hotel Belmont.

It is distinctly Marmon in design and construction and offers many advancements in both body and chassis. It has the further distinction of being the first eight cylinder automobile in the world to be priced below the $1,000 mark. Advance models of the new car are now being shown privately to deal-

(Continued on Page 5)

Ford to Exhibit Improved Model A At Detroit Show

Special from A. D. N. Detroit Bureau

Detroit, Jan. 17.—Ford Motor Company will have a complete showing of Model A cars at the Detroit Automobile Dealers' Association Show in Convention Hall, when the exhibit opens January 19. The cars are presented in a wide variety of attractive colors, with a new spring engine-front support, a six-brake system and a new single plate clutch.

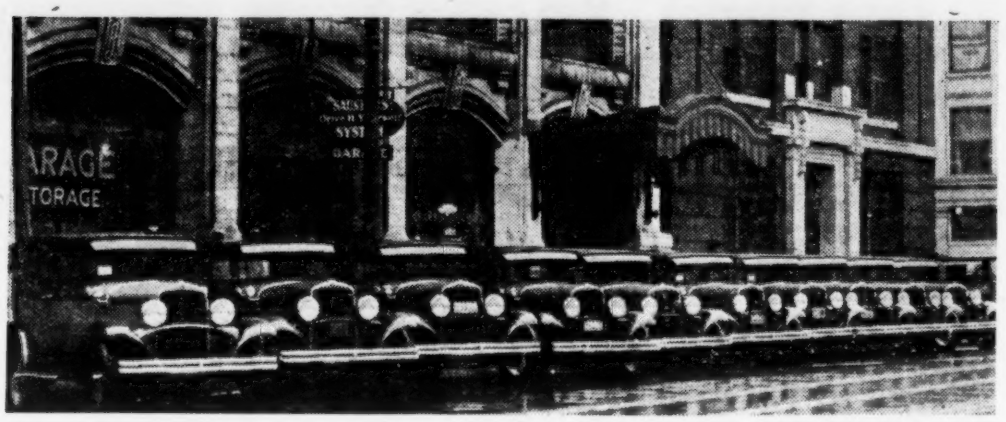
Ford experimental laboratories developed the spring support for the engine and the engineering staff reports that it acts efficiently in eliminating the transmission of engine vibration to the frame and the body of the car.

The six-brake system consists of four-wheel brakes, completely inclosed to protect drum and lining against dirt, water and grease, and full external expanding, and an emergency or parking brake on both rear wheels, also inclosed, but internal expanding. Brake drum on the rear wheels is a "two-in-one" type, one drum being part of the four-wheel service brake operated by foot pedal, and the other for the emergency or parking brake, which is independently operated by hand lever.

MAY OPERATE VELIE PLANT IN NEAR FUTURE

Moline, Ill., Jan. 17.—W. L. Velie, Jr., said that negotiations are under way with two prospective purchasers, one of whom proposes to open the automotive plant, which was suspended immediately after the elder Mr. Velie's death. No definite statement has been forthcoming yet as to the results of these conferences.

Saunders System Buys De Soto Sixes



THIS FLEET OF TEN DE SOTO SIXES has been purchased by the Saunders System in Indianapolis, Ind., from Charles G. Sanders, Inc., local De Soto distributor. Coupes, sedans, coaches and sport models are included in the allotment.

G. M. Truck Co. Adopts Straight Ratings Plan For Truck Capacities

PONTIAC, MICH., Jan. 17.—"Straight ratings," a new basis for establishing truck capacities accurately, in advance, was announced here today by the General Motors Truck Company.

And hereafter, it was stated, all trucks manufactured by this company will be described, sold, and unqualifiedly guaranteed on this more modern and exact basis. Such terms as "one ton," "two ton," etc., which have been customary in defining capacity ratings, will no longer be used.

"Those old terms have become vague, usually misleading," declared O. L. Arnold, vice-president directing sales for the company. "They have grown to be a kind of veiled 'hedging' by which both buyer and seller have evaded real clean-cut discussion of the overload and guarantee question. And by beating around the bush on that point both have encouraged definite inefficiencies in the operation of trucks."

The purpose and effect of this new development, Mr. Arnold pointed out, are to clarify the problem of wise investment in trucks as well as to increase the efficiency of operating them.

"Under 'straight ratings' a man can tackle the job of buying new equipment in the only clear and logical way: (1) determining just what his truck must carry in the work for which he needs it; (2) buying equipment on exact, advance information as to what it will do with highest efficiency under practical working conditions."

The "straight rating" method is very simple, as explained by Mr. Arnold. The exact chassis weight for any General Motors truck is known and given. So, too, is the exact weight of any type of body suitable for that model truck. These, subtracted from the maximum allowable total gross weight for that truck—also given exactly—show the pay-load capacity. And it is a pay-load capacity fully guaranteed; a capacity that will be handled with highest year-in, year-out efficiency by the truck in question.

Well - recognized discrepancies have existed in the rating of truck capacities by such terms are "one ton," "two tons," etc.

"There are so-called 'one-ton' trucks on the market today with variances of as much as 1,500 pounds, in chassis weights. And when you get into the larger capacities these differences are correspondingly greater," Mr. Arnold said.

"Differences of as much as half a ton are common between different types of bodies.

"A man bought a truck with no other thought in mind than overloading it from 50 per cent. to 100 per cent. in actual operation. A manufacturer sold it with the same unexpressed thought in mind.

"It fogged the issue, obscured real values, encouraged a method of buying and using trucks that could not fail to bring about high operating and maintenance costs, nullified guarantees, shortened life of the vehicle and disputed adjustments of tire equipment.

"That is why we now eliminate this vagueness, these risks, in favor of clear, accurate, advance knowledge and guarantees based on mutual understanding. It is, as we see it, another step toward more efficient use of more efficient trucks."

"Under 'straight ratings,'" Mr. Arnold declared, "a buyer gets exactly the equipment he needs—and knows he's getting it.

"The man who requires a comparatively light type of body—with a given model—will naturally be able to handle more payload than the man who needs a heavier type body. In the first instance he will not have the expense of buying and operating more 'capacity' than he needs. In the second instance, he will not have to risk breakinng the terms of his guarantee, running up his maintenance and operating costs and shortening the life of his truck by overloads.

"And by this method it becomes possible, for the first time, to know in advance exactly what tire equipment is needed to do an efficient job—and therefore to equip a truck with such tire equipment. This means substantially increased tire mileage, which is a big operating economy, and complete elimination of disputes over tire adjustments.

"The 1929 light duty series of General Motors trucks, powered by 1929 Pontiac engines, will be sold only on the 'straight rating' basis," Mr. Arnold stated. "In this series we have seven different basic types having three 'straight rating' capacities. With these, eight different factory-built bodies are available.

"Our new Buick-powered series, for heavier duty and medium duty, provides no less than thirty-three different basic types having six 'straight rating' capacities—all exactly determinable in advance and guaranteed on that basis.

"For heaviest duty we have two different types, both with the same basic 'straight rating' capacity—powered by the Big Brute engine.

"This illustrates the definiteness of the statement that the line of General Motors trucks is complete—a range of forty-two different basic 'straight rating' types, each one as modern as modern engineering skill and experience can produce, priced without 'padding'—with 'extra value' in place of the unsound 'excess allowances,' and with a real work test offer backing every statement made about every truck in the line," he concluded.

Make Money with Sherman Hoods!

THEY bring the customer in *because he is sold before he opens your door.* He knows he needs Sherman Hoods — *now tell him you handle them.* SHERMAN GUARANTEED WATERPROOF IGNITION HOODS make the old car a 1929 model. Here's a phantom view of the Sherman Hood mounted on the distributor. See how snug it fits. And it can't sweat because it *breathes.* No. "P" is the regular spark plug Hood with push terminal (also elbow type "F" for fork terminal and outboard motors). No. "K" is the Willys-Knight spark plug Hood with sleeve base to fit Well. No. "A" is for all Torpedo Type Coils (also "B" and "C" for other types). The Sherman Line is complete. Write for details. Get the added profits now.

SHERMAN MOTOR PRODUCTS, INC.
17 West 60th Street, New York City

Sherman Hoods are Standard Equipment on the new Checker Cabs for 1929

BURGAMY AUTOMOTIVE PARTS, CINCINNATI, CHANGES HANDS

Cincinnati, Jan. 17.—The Burgamy Automotive Parts Company has been purchased by J. E. Broxton and C. G. Dixon, formerly of Akron. John R. Burgamy, who founded the business, was forced to relinquish control because of ill health. Mr. Broxton formerly conducted a wheel, rim and tire business in Akron and Mr. Dixon gained his automotive experience with the Firestone Company. The firm name will be continued for an indefinite time.

SPARKS *from* DETROIT

Art Lovers

* * *

G. M. Rules of Success

* * *

License Plates

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Bronze Tablets

Walter Boynton—Detroit Editor

COLLECTION OF PAINTINGS by distinguished artists is a part of the interests of a number of automobile men in Detroit. Lawrence P. Fisher of Cadillac is the owner of many fine canvases, several of them by the Eighteenth Century English portraitists. Among them is Gainsborough's famous "Portrait of Mrs. Collins," and this has a place of honor among the pictures now owned by Mr. Fisher.

William J. McAneeny, Hudson Motor Car Company, has recently bought "The Kettledrum Players," a well-known painting by Frans Hals, the Seventeenth Century Dutch painter. This is a small work, the panel being only a little over a foot square in the original, which has now been added to the art treasures owned by Detroiters.

* * *

Floyd Allen, an assistant to the president of General Motors, was a recent speaker before the Detroit Rotary Club. He chose for his subject the principles upon which the success of General Motors has been built. These, he said, are four in number: fair play, intimate knowledge of business, keeping on open mind and hard work, particularly by the men at the top. As a conspicuous example of the fourth, especially, Alfred P. Sloan, Jr., readily qualifies. He permits exceptionally few things to distract him from his business, and probably puts in longer hours than any other man in the big organization that he heads.

* * *

DETROIT, Flint, Pontiac, Saginaw and Bay City are in line for inclusion in a new air mail service that will speed deliveries. A proviso is that flying fields shall be equipped for night work. Connection with the transcontinental line at Cleveland, with consequent east and west dispatch, is one of the benefits to accrue from the proposed plan.

* * *

Sales of 1929 automobile license plates in the Detroit area have exceeded those of 1928 by some 50,000, for the same period. An interesting feature of this condition is that an even heavier percentage of law-breakers existed at the opening of this year than in the first days of 1928. The police were firm (orally) in insisting that old plates were illegal; more people operated cars with them. Q. E. D.

* * *

Manganese bronze tablets, made at the United States Navy Yard in Philadelphia, will mark the international boundary line between the United States and Canada on the new Ambassador Bridge, now in process of rapid erection. A man may now heave a sigh of relief as he enters this country, or Canada, according to his predilection. The first tablet from the foundry will be placed on the Detroit-Windsor bridge, and duplicates are to be set in 1929 on the six other spans that link the two countries.

* * *

Hugh J. Ferry, treasurer of the Packard Motor Car Company, has been elected to the board of directors of the Detroit Company, affiliated with the Detroit and Security Trust Company.

* * *

"Ideas," in connection with the attempted regulation of Detroit's traffic, have reached high figures, stimulated by the offer of prizes for the best. One of the chief traffic problems is the number of suggestions in connection with traffic itself. Another case of "Too many hooks spoil the cloth," to paraphase the old, but truthful, saw.

* * *

At least one serious element has been introduced into the comic opera situation with respect to jitneys in Detroit. In connection with the petitions circulated for the jitneurs, it is strikingly evident that the signers asking for a referendum have styles of handwriting that are suspiciously similar. The corporation counsel says that the petitions constitute the most colossal fraud in the political history of Detroit; this is covering a considerable area, but the facts are apparently with the town lawyer. Threats of prosecution for perjury are threatened by the authorities against the men who made affidavit as to the bona fide character of those signatures that are so very clearly the work of one man.

* * *

C. A. Ward and Henry Hart, retail salesmen for Warner Sales and Service Company, Studebaker-Erskine dealer at Highland Park, have been awarded gold medals and named as "president," the highest honor obtainable.

* * *

When James W. Bishop, who digs up antiques for the Ford Museum, spoke before the Detroit Engineering Society the other night, he gave some interesting side lights on Mr. Ford. One of them is that the motor magnate carries a jewsharp in a mahogany case in one of his pockets and plays "Yankee Doodle" on it.

The museum is to be 1,290 feet long and 804 feet wide, and a curious feature about the surroundings will be that a foot of the soil now about the buildings at Menlo Park will be removed and transported to Dearborn, where it will be spread around the museum buildings at grade. The machinery, much of it fully half a century old, will be in running order, since Mr. Ford wants nothing "dead" in the museum.

JOHNSTON, INC., TO HANDLE PIERCE-ARROW STRAIGHT 8

Trenton, N. J., Jan. 17.—W. S. Johnston, Marmon dealer and salesman in Trenton since 1917, has taken over the sales and service of the new line of Pierce-Arrow Straight Eight cars. Johnston, Inc., will have the new Pierce-Arrow cars on display at 222 North Hermitage Ave., in addition to the new series of Marmon cars.

Public Interest Revealed in Show at Cincinnati

Attendance on Opening Day Is Placed at 10,000

By ROGER BURLINGAME

CINCINNATI, Jan. 17.—Attendance records at the Cincinnati automobile show were shattered Sunday afternoon and evening, when a throng nearing the 10,000 mark was attracted by the display of 300 1929 model motor cars, representing thirty-one makes at the opening of the 1929 exhibition of the Cincinnati Auto Dealers' Association.

More than 1,000 persons were congregated in front of the new Music Hall when the doors were thrown open at noon, and thereafter throughout the afternoon and evening there was a continual stream of visitors. All three exhibition halls in the big building are given over to the display, decorated lavishly, but in complete in harmony with the motor cars, the beauty of the exhibition being greatly enhanced by a flood of light from thousands of incandescent bulbs and arc lamps.

Despite the fact that promise of jazz programs by Paul Whiteman's orchestra served to attract hundreds to the exhibition, dealers declare interest evinced in the cars shown was greater than at any former event, and actual orders booked and live prospects secured are said to have been greatly in excess of those of the opening day last year.

C. A. D. A. officials announced that more than 4,000 persons had passed through the turnstiles by 3 o'clock, and before the doors were closed at 10.30 the number had neared 10,000. The fact that Cincinnati experienced the first real snow of the season and near zero temperature, combining to make driving hazardous, made the remarkable attendance all the more inspiring. All dealers were enthusiastic, and the auspicious inaugural, in their opinion, gives promise of a most prosperous year.

The unusual attention of manufacturers to body lines and color combinations, is marked in this years' exhibition. The elaborate interior appointments and upholstery are attracting attention of women visitors to an unusual degree. Their interest in these factors was equaled by their evident knowledge of motor mechanics, indicating that the woman today has become the court of last resort in the matter of selection of the motor car for family use or her individual possession.

J. W. Tarbill, president of the C. A. D. A., and directors of the organization are highly gratified over the opening and are confident the interest already apparent in this year's offerings forecasts a good business year, with every indication that spring demand, unless handicapped by weather conditions, will exceed that of any previous year.

Naturally, dealers having choice positions in the exhibition halls were kept busy entertaining visitors, but every car had its devotees and crowds were milling about the individual booths almost constantly, the only break coming during the concerts of the Whiteman orchestra at 3 o'clock in the afternoon and 9 at night. The exhibition will continue throughout the week, closing Saturday night.

EIGHTH ANNUAL SHOW AT LAWRENCE, MASS., DATED

Lawrence, Mass., Jan. 17.—The eighth annual Lawrence Automobile Show will be held February 6, 7, 8 and 9 at the American Woolen Company Building at Jackson and Methuen Streets. The show is being arranged by a committee composed of Paul T. Searle, chairman; Alexander Semple, Jr., treasurer; James K. Dow, secretary; Max M. Warshaw and Frank Gould.

New Home of Graham-Paige at Amarillo

THE FIRM OF TONEY CHISUM, INC., which recently became Graham-Paige distributor at Amarillo, Tex., is now located in the building, shown above, which is said to be one of the finest of its kind in the state. It has a total floor area of 34,000 square feet, with a new car salesroom 45x70 feet and a used car salesroom 70x140 feet. Toney Chisum, who heads the firm, handled another leading make for thirteen years before taking on the Graham-Paige.

37 Makes of Cars Shown at Newark

NEWARK, N. J., Jan. 17.—**Newark's twenty-second annual automobile show is under way this week at the Sussex Avenue Armory with thirty-seven makes of cars, a total of 280 vehicles and forty accessory exhibits. The show, as in previous years, is under the auspices of the dealers of the city. Claude E. Holgate is manager.**

The show days were designated as follows: Monday, "Dealers' Day;" Tuesday, "Shop Equipment Day;" Wednesday, "Auto Clubs' Day," Thursday, "Suburban Day;" Friday, "Accessory Day," and Saturday "Good Roads Day."

Horace A. Bonnell heads the committee in charge of this year's show. He is aided by Joseph C. Bell, William L. Mallon and Clarence E. Fisher.

Cars being exhibited follow: Auburn, Lawrence Motor Car Company; Black Hawk and Stutz, Charles Motors, Inc.; Cadillac and La Salle, Uppercu Cadillac Corporation; Chandler, Model Garage, Inc.; Chevrolet, Foley-Chevrolet Company; Chrysler and Plymouth, De Cozen Motor Company; De Soto, Newark Motor Company; Dodge Brothers, Hillas Motor Company; Durant, Durant Motors Company of New Jersey; Dusenberg, Lawrence Motor Car Company; Erskine and Studebaker, Studebaker Sales Company; Ford, Fischer Auto Sales; Franklin, Franklin Motor Company; Graham-Paige, Graham-Paige Company; Hudson and Essex, Hudson Motor Company of New York; Hupmobile, G. W. Tisdale, Inc.; Lincoln, MacKenzie Motors, Inc.; Locomobile, Connecticut Locomobile Company; Marmon, Marmon-Fanning Company; Nash, Nash-Newark, Inc.; Oakland and Pontiac, Mallon Motor Company; Oldsmobile, Burack-Oldsmobile Company; Packard, Packard Motor Company of New York; Peerless, J. W. Mason & Son; Pierce-Arrow, Washington Motor Car Company; Reo, Reo Motor Company, Inc.; Rolls-Royce, Rolls-Royce Sales; Stearns-Knight, Edward-Knight Sales Company; Whippet and Willys-Knight, Griggs-Whippet-Knight Company.

TRAINLOAD OF REO CARS ARRIVES IN LOS ANGELES

Los Angeles, Jan. 17.—A solid trainload of Reo Flying Cloud Mates and Masters recently arrived in Los Angeles for distribution to southern California dealers. The trainload is one of the largest winter shipments of automobiles ever delivered to one distributor, according to H. E. Woodward, president of the Reo Motor Car Company of California.

N. Ware of Houston Sells 153 Cars in Period of 11 Months

Houston, Tex., Jan. 17 (U. T. P. S.)—N. L. Ware, salesman for the Alex Clark Motor Company, Hudson, Essex dealers, has set a new sales record believed to be as high or higher than any other other salesman of the United States in the same price range.

Ware sold and delivered 153 new Hudson and Essex automobiles from January 1, 1928, to December 1, 1928, a period of eleven months. For the third successive year, Ware has won a vacation trip through the East as a reward for his high sales records.

RAWLS MOTOR CO. ADDS DURANT LINE OF CARS

Raleigh, N. C., Jan. 17.—The Rawls Motor Company, local Graham-Paige dealership, has acquired the franchise for distribution of Durant cars in this territory. The company will continue selling the Graham-Paige line, according to C. H. Rawls, president and general manager.

AJAX SALES UP 40 PER CENT.

Racine, Wis., Jan. 17.—The Ajax Auto Parts Company, maker of automobile and tractor jacks, did 40 per cent. more business in 1928 than in 1927. The firm can produce 10,000 jacks daily, or 3,000,000 annually, according to John W. Bate, manager.

Show at Detroit Opens Saturday

Special from A. D. N. Detroit Bureau

Detroit, Jan. 17.—The twenty-eighth show of the Detroit Auto Dealers Association opens Saturday, January 19 in Convention Hall, in an elaborate setting and with $2,000,000 worth of cars and equipment occupying every square foot of available space.

More than 200 of the new passenger cars will be shown, with trucks fully represented and an accessory exhibit, including complete service equipment, some of it in operation, will be on view.

A feature of this year's show will be the body salon, in which will be shown bodies by Fleetwood, Dietrich, LeBaron, Brunn, Brewster, Willoughby, Judkins, Hibbard and Darin.

The show runs for a week, with Wednesday, January 23, as "Michigan Day." On that date the Michigan Automotive Trade Association will hold its ninth annual convention in Detroit, with hearquarters at the Book-Cadillac. At the annual banquet in the evening Capt. E. V. Rickenbacker of the Cadillac Motor Car Company will be the principal speaker, on "Transportation by Land, Water and Air."

SIMONDS APPOINTED

Milwaukee, Wis., Jan. 17.—C. D. Simonds has been appointed sales engineer for the Four Wheel Drive Company, with offices in New York.

CAR SALES GAIN IN WASHINGTON

Increase for All 1928 Over 1927 Amounts To 11.7 Per Cent.

By D. M. TREPP

SEATTLE, WASH., Jan. 17.—New car registrations for last December, compiled by the Motor List Company and just released, show 3,059, compared to 2,526 for December, 1927.

For all of 1928 the total is 39,188, compared to 35,079 for all of 1927. This is a gain of 11.7 per cent. In 1926, the banner year, the total registrations of new cars was 43,384, or 4,196 in excess of last year. All of the dealers are getting set for further gains during 1929 in this state and are generally optimistic.

Last December fell off compared to December, 1926, when the figures stood at 4,018.

In the ladder of sales for last month Ford took its lead of the entire year, accounting for 967 registrations. Closely pressed by Buick, at 250, was Chevrolet, with 251. This is the low mark for Chevrolet for the year and was due to the announcement of the new six.

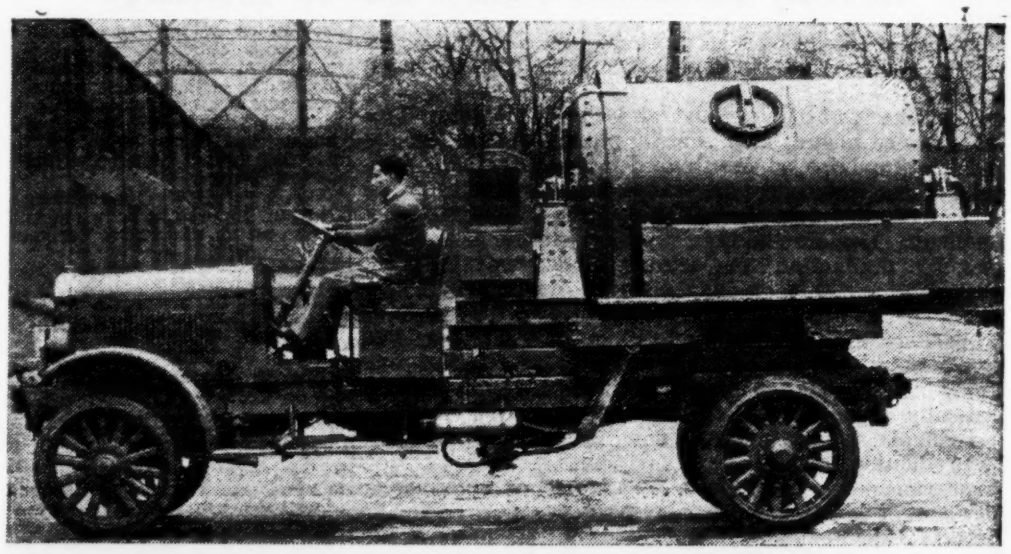
Chrysler, now distributed by the American Automobile Company, had a good month with 212. Dodge was fifth with Durant in a dead heat of 175 each. Pontiac came next with 161, Nash 128, Whippet 98, Essex 84, Studebaker 75, Hupmobile 56, De Soto 52, Reo 52, Willys-Knight 48, Graham-Page 45, Oldsmobile 41, Hudson 33, Oakland 27, Cadillac 23, La Salle 23, Erskine 18, Packard 15, Franklin 11, Chandler 8, Peerless 8, Falcon-Knight 7, Marmon 5, Auburn 3, Lincoln 2, Pierce-Arrow 1 and Velie 1.

Territorially King county (Seattle) led the state as usual, 1,079 being its total. Pierce county (Tacoma) was second, 273; Spokane county, usually crowding or beating Pierce, dropped back to 181. Yakima was up with 169, indicative of good fruit crops and income from the sales of produce in that fertile region. Chelan, 101, in the same region, made a good record. In the lumber district, Grays Harbor led with 151, and Snohomish was next with 134. Whatcom (Bellingham) had but 68, and Walla Walla, in the agricultural region, was far down, 38.

TRENTON AUTOMOBILE CO. NOW IN NEW QUARTERS

Trenton, N. J., an. 17. — The Trenton Automobile Company, Lincoln dealer, is now located in its new home at 842-852 Brunswick Ave. The building is modern in every respect and contains the sales and service departments. J. L. Green is manager.

Autocar Good-Roads Concrete Carrier



ONE OF THE ATTRACTIONS at the road equipment exposition of the American Road Builders' Association held in Cleveland this week was this Autocar concrete carrier. The Good Roads Machinery Company, Inc., Kennett Square, Pa., builds the concrete carrier. The truck is an Autocar.

Automotive Daily News

"Of, By and For the Entire Automotive Industry"

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Snow Removal

IN THIRTY-SIX of the states of our Union, snowfall is a regular part of winter's activity. As an interrupter of highway traffic, snow has been a serious economic burden. As motor transportation became a major arm of our whole national transport system, it became evident that main arteries of traffic must be kept clear of snow. In other words the cost of snow removal became a less serious financial loss than the interruption of traffic. So thoroughly has this lesson been learned that during the winter of 1929 there will be 125,000 miles of main highway kept clear at a very considerable expense to the various states.

Exactly how this business of snow removal works out on a financial basis is well shown by the experience of Wisconsin, a state where the snowfall is heavy. Last winter it cost the state $520,000 to keep its main roads open. During this period the state collected $820,000 in gasoline taxes. Obviously this fuel tax collection would not have been made if the roads had been blocked by snow. But far more important than the state's getting back in tax collections more than it expended on the actual work of keeping the roads clear, is the huge sum saved to citizens and companies by the continuance of highway transportation in spite of weather conditions. Indeed, during certain periods of last winter in Wisconsin, motor transportation, thanks to cleared roads, was running far ahead of railway traffic and was the only means of preventing widespread suffering and loss.

Improvement in snow removal equipment, development of preventive measures, such as snow fences at strategic points, have decreased the cost of keeping the roads clear. This winter, in spite of the fact that a vastly longer mileage of roads will be kept open, 125,000, as we noted above, the cost to the states will not be as great as in the past. The total amount spent this year will not run much above $1,000,000. We can safely look ahead to the not distant time when every main highway in the country will be kept open for traffic every day in the year, with a consequent huge addition to the efficiency and economic stability of the whole land.

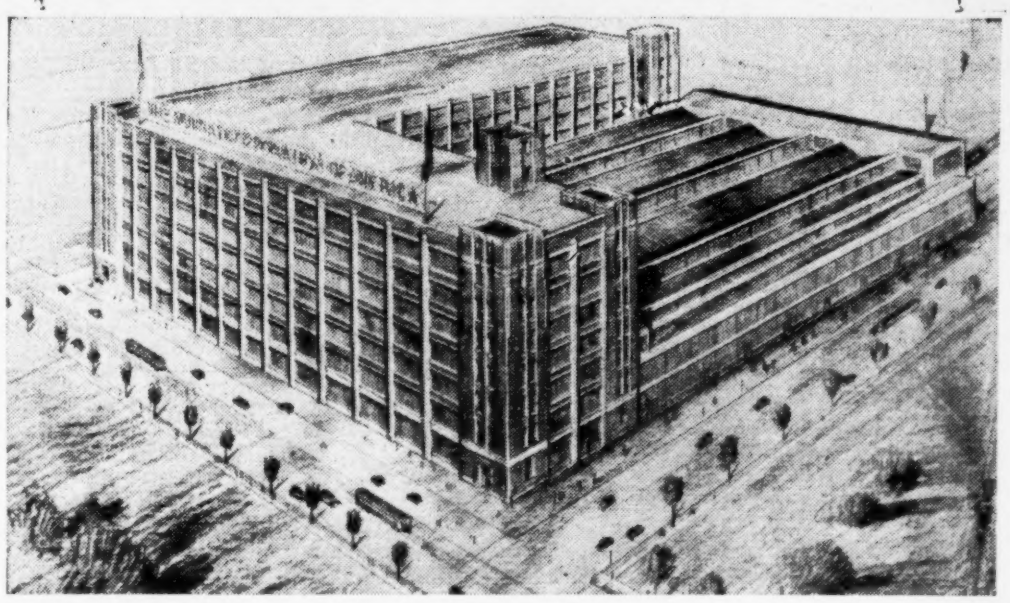
A Manufacturing Miracle

FEW OF US REALIZE the tremendous tasks that are accomplished by the production end of the automotive industry. For instance, when a company announces a totally new line replacing a previous offering, few of us know the almost unbelievable task that lies behind that statement. For a modern manufacturing plant to change from a long produced model to the production of a new one gives the manufacturing division the task of accomplishing an orderly revolution.

About the first of November the Chevrolet Motor Company began the task of changing its plant from the production of its time-honored four-cylinder model to that of the new six. Less than sixty days after the beginning of this shift, the new cars were being shipped in gradually increasing numbers. Dealers had been supplied with demonstrators and regular production was actually under way. By the first of February, ninety days after the change had been inaugurated, the gigantic Chevrolet plants will be running on full production schedules. Only W. S. Knudsen, president of the company, and his co-workers in the production division know how the task was accomplished so rapidly. Characteristically enough Mr. Knudsen gives the whole credit to the individuals, from executives down to the last mechanic on the production line.

Just remember that Henry Ford, one of the master production men in the world, needed well over a year to make the change from Model T to Model A, that his huge plants were actually shut down for six months, and the accomplishment by the Chevrolet organization begins to assume its place as an actual manufacturing miracle.

Proposed $5,000,000 Murray Corp. Body Plant



Detroit, Jan. 17.—Details of an expansion program which will entail the expenditure of over $5,000,000 for new building and the rearrangement of present plants of the Murray Corporation of America have just been announced by A. P. Dowell, vice-president of manufacturing.

The major part of this expenditure covers a new press plant for the production of automobile body and chassis stampings, a seven-story body assembling building, both in Detroit, and a large modern wood mill in Memphis, Tenn., where body wood parts will be manufactured. With these added facilities the Murray plants will be capable of building upward of 2,500 automobile bodies per day.

The press plant and assembly building shown in the above illustration are under construction at the present time and will be completed in the early spring of 1929. They are of the latest steel and reinforced concrete type of construction. The press plant will be of the saw-tooth roof type 425 feet by 250 feet in dimensions, and of a height equivalent to a three-story building. Under its roof will be two railroad sidings for incoming and outgoing materials, 150 presses for making steel stampings and seven traveling cranes for handling stamping dies and materials in process. Mezzanine floors will be used for die storage and stocks of finished stampings.

Floor area of the new assembly building will be 540,000 square feet, the building being L-shaped, with lengths of 525 feet and 350 feet and a width of 100.

BOND ELECTRIC TO BUILD MODERN STORAGE BATTERY PLANT AT INDIANAPOLIS

Jersey City, N. J., Jan. 17.—The Bond Electric Corporation, formerly known as the Yale Electric Corporation, announces that a complete modern storage battery manufacturing plant is being assembled in the old National Automobile Company plant, 1129 East 22d St., Indianapolis. The plant will have a daily production capacity of from 200 to 300 batteries, and the working force will be increased as soon as the plant gets into active production.

The Indianapolis company, which is a branch of the local corporation, will manufacture storage batteries for all makes of automobiles and radios.

HUSKY CORP. MOVES INTO NEW HOME AT KENOSHA

Kenosha, Wis., Jan. 17.—The Husky Wrench has moved to its new home in Kenosha. The factory building contains 40,000 square feet of floor space. It is built of brick, concrete and steel, well lighted and ventilated and is equipped with the most modern machinery for making Husky socket wrenches and other Husky products.

In front of the factory building is a large attractive office building. Just inside of the entrance is a large room especially set aside for friends and customers who come to visit and to see how Husky products are made. In this room there is on permanent display all of the Husky products, and friends can comfortably sit here and discuss their business problems.

On January 1 the Husky Wrench Company changed its name and will be known as the Husky Corporation.

RYAN IN LOS ANGELES TO SIGN TIRE CONTRACT

Los Angeles, Jan. 17.—Frank L. Ryan, vice-president and general sales manager for the India Tire and Rubber Company, Akron, O., is in this city. He is here primarily to sign a new contract with Nelson & Price, Inc., for the Los Angeles dealership of India tires. The new contract, said to be the largest individual tire transaction ever signed, calls for a minimum sale of $5,500,000 worth of India tires and tubes within a period of three years.

MADISON KIPP GAINS 50%

Madison, Wis., Jan. 17.—The Madison Kipp Corporation did 50 per business in 1928 than in 1927, according to Thomas E. Coleman, president. more business in 1928 than in 1927, according to Thomas E. Coleman, president. The Madison Kipp Corporation makes parts for the automotive industry.

N. J. LACQUER CO., INC., GETS CHARTER; PLANS EXPANSION

North Bergen, N. J., Jan. 17.—The New Jersey Lacquer Company, Inc., of 920 Dell Ave., North Bergen, has filed articles of incorporation with an authorized capital stock of $40,000. The concern has been operating here for several months and is planning expansion.

CALENDAR OF COMING EVENTS

JANUARY

11-20—**Amsterdam, Holland.** Automobile show.
12-19—**Schenectady, N. Y.** Automobile show.
12-19—**Buffalo, N. Y.** Automobile show.
12-19—**Newark, N. J.** Automobile show.
12-19—**Philadelphia.** Automobile show.
12-19—**Milwaukee, Wis.** Automobile show.
13-19—**Cincinnati, O.** Automobile show.
14-18—**Los Angeles, Cal.** American Society for Steel Treating, semi annual meeting.
14-18—**Los Angeles, Cal.** Western States Metal and Machinery Exposition.
14-19—**Springfield, O.** Automobile show.
14-19—**Atlanta, Ga.** Automobile show.
14-19—**Cleveland, O.** American Roadbuilders' Association, Inc., convention and show.
14-19—**Nashville, Tenn.** Automobile show.
15-18—**Detroit, Mich.** Society of Automotive Engineers, annual meeting.
17-19—**Newburgh, N. Y.** Automobile show at State Armory.
19-21—**Montreal, Canada.** National Motor Show of Eastern Canada.
19-26—**Albany, N. Y.** Automobile Dealers Association, automobile show.
19-26—**Brooklyn, N. Y.** Automobile show at Twenty-third Regiment Armory.
19-26—**Atlantic City, N. J.** Automobile and Speed Boat Show on Young's Million Dollar Pier.
19-26—**New Brunswick, N. J.** Automobile show at Y. M. H. A.
19-26—**Pittsburgh, Pa.** Automobile Dealers Association, passenger car, accessory and shop equipment show.
19-26—**Detroit, Mich.** Detroit Automobile Dealers' Association Show at Convention Hall.
19-26—**Baltimore, Md.** Automobile show, 5th Regiment Armory.
19-26—**Louisville, Ky.** Automobile show at Armory.
20-26—**Columbus, O.** Automobile show.
21-26—**Wilmington, Del.** Automobile show.
21-26—**Scranton, Pa.** Automobile show.
21-26—**Rochester, N. Y.** Twenty-first Annual Automobile Show at Edgerton Park.
21-26—**Erie, Pa.** Automobile show.
21-26—**Williamsport, Pa.** Automobile Dealers' Show.
21-26—**Niagara Falls, N. Y.** Buffalo Automobile Show.
21-Feb. 2—**Atlantic City, N. J.** Automobile show at Million Dollar Pier.
23—**Detroit, Mich.** Auto Trade Association. Ninth Annual Convention at Book-Cadillac Hotel.
23-26—**New Haven, Conn.** Automobile show.
23-26—**Batavia, N. Y.** Automobile Dealers' Association Show.
23-Feb. 6—**Cairo, Egypt.** Second International Automobile Show.
24-25—**Greensboro, N. C.** North Calolina Automobile Trade Association, annual convention.
24-26—**Ravenna, O.** Portage County Automobile Show.
26-Feb. 2—**Miami, Fla.** Automobile show.
26-Feb. 2—**Allentown, Pa.** Automobile show.
26-Feb. 2—**Chicago.** Automobile Salon at Drake Hotel.
26-Feb. 2—**Chicago.** N. A. C. C. Show.
26-Feb. 2—**York, Pa.** York County Automobile Show.
26-Feb. 2—**Cleveland, O.** Automobile show.
26-Feb. 2—**Washington, D. C.** Automobile show.
26-Feb. 4—**San Francisco, Cal.** Automobile show.
28-29—**Chicago.** National Automobile Dealers' Association Convention at Palmer House.
28-Feb. 1—**Roanoke, Va.** Automobile show under direction of Standard Producing Company.
28-Feb. 2—**Elmira, N. Y.** Automobile Merchants' Association, annual show.
28-Feb. 2—**Portland, Me.** Automobile show at Exposition Building.
28-Feb. 3—**Cumberland, Md.** Automobile show at State Armory.
29-Feb. 2—**Lancaster, Pa.** Automobile show.
30-Feb. 10—**Rome, Italy.** International Automotive Exhibition.
30-Feb. 16—**Rome, Italy.** International Salon.

FEBRUARY

2- 9—**Hamlin, Minn.** Northwest Automobile Show.
2- 9—**Harrisburg, Pa.** Nineteenth Annual Automobile Show.
2- 9—**Minneapolis, Minn.** Northern Automobile Show at Livestock Pavilion.
2-10—**Seattle, Wash.** Automobile show.
4- 6—**St. Petersburg, Fla.** Automobile show.
4- 9—**Toledo, O.** Annual automobile show.
4- 9—**Ottawa, Canada.** Motor Show at Coliseum.
4- 9—**Syracuse, N. Y.** Automobile show.
4- 9—**St. Louis, Mo.** Automobile show.
4- 9—**Grand Rapids, Mich.** Automobile show.
4- 9—**Wichita, Kan.** Automobile Dealers' Association Show.
5- 7—**Charleston, S. C.** Automobile show.
5- 9—**Kewanee, Ill.** Automobile show.
5- 9—**Peoria, Ill.** Automobile show.
6- 9—**Lawrence, Mass.** Automobile show at American Woolen Co. Building.
6- 9—**Cedar Rapids, Ia.** Automobile show.
7-10—**Rockford, Ill.** Twentieth Annual Motor Car Show.
9-16—**Kansas City, Mo.** Automobile show at American Royal Building.
9-16—**Los Angeles, Cal.** Automobile Salon at Hotel Biltmore.
11-16—**Binghamton, N. Y.** Automobile show, State Armory.
11-16—**Denver, Col.** Automobile show at Auditorium.
13-15—**Washington, D. C.** National Paving Brick Manufacturers' Association, annual meeting at Mayflower Hotel.
13-16—**Mankato, Minn.** Automobile show.
13-18—**Denver, Col.** Automobile show.
16-23—**Canton, O.** Automobile show.
16-23—**Hartford, Conn.** Automobile show.
16-23—**Providence, R. I.** Automobile show.
16-23—**Trenton, N. J.** Fourteenth Annual Automobile Show.
18-23—**Des Moines, Ia.** Automobile show.
18-23—**Omaha, Neb.** Automobile show.
18-23—**Memphis, Tenn.** Automobile show.
18-23—**Chattanooga, Tenn.** Annual automobile show.
21-23—**Holyoke, Mass.** Automobile show.
22-Mar. 3—**Copenhagen, Denmark.** Automobile exhibition of passenger cars.
23-Mar. 2—**San Francisco, Cal.** Automobile Salon at Palace Hotel.
25-Mar. 2—**Indianapolis, Ind.** Automobile Trade Association, annual automobile show.
25- —**Houston, Tex.** South Texas Annual Automobile Show.
25-Mar. 2—**Springfield, Mass.** Automobile show
26-Mar. 2—**Evansville, Ind.** Eighteenth Annual Automobile Show.
27-Mar. 2—**Sioux City, Ia.** Automobile show.

MARCH

2- 9—**Boston, Mass.** Automobile show.
2-10—**Los Angeles, Cal.** Sixteenth Annual automobile show.
3-13—**Leipzig, Germany.** Automobile fair.
5-10—**Springfield, Ill.** Automobile Dealers' Association, Eleventh Annual Automobile Show.
9-17—**Copenhagen, Denmark.** Trucks, motorcycles, etc., shows at Forum.
15-29—**Geneva, Switzerland.** Automobile show.

Williams Gives Details Of New Roosevelt Eight

(Continued from Page 1)

ers and distributors in various leading cities in the country.

Specifications of the new Roosevelt include a 70-horse power straight eight engine of the L-head type, incorporating many proved advancements. The engine has a bore and stroke of 2¾ by 4¼ inches and has a piston displacement of 201.9 cubic inches. The S. A. E. rating is 24.2.

Capable of speeds up to seventy miles an hour, the car is said by Marmon to have exceptional roadability and riding comfort. Long semi-elliptic springs, covering 90 per cent. of the wheel base, work in "spring compensators," a Marmon development, causing the springs automatically to shorten and stiffen with a heavy lead or under a severe road shock. Conversely, they lengthen and provide greater resiliency under a light load. Characteristic Marmon straight eight acceleration makes the car versatile in traffic. Gasoline consumption is said to be exceptionally low.

Brakes are of the positive four wheel mechanical type.

The steering system is of Ross cam and lever type, providing ease of steering, with great steadiness at high speeds. The steering wheel is 18 inches in diameter, with small grip of modern construction. The turning diameter of the car is 36 feet.

Low unsprung weight adds still further to the riding qualities of the new Roosevelt. In accomplishing this a sturdy rear axle is used in combination with the Hotchkiss drive, which imparts its torque through the springs.

Vibration is eliminated by means of a high frequency modulator, another Marmon engineering development of the past year. This device stops crankshaft vibration at its source and produces a previously unattached smoothness.

Full pressure lubrication is provided in the engine. This system forces oil to every rotating part. The oil capacity is six quarts.

The cooling system is equipped with thermostatic control. A thermostat between the engine and the radiator permits the engine quickly to reach its most efficient operating temperature. The cylinder block is water jacketed the full length of piston travel, while the system has a large radiating surface and a five gallon cooling capacity.

An effortless gear-shift is provided in the single plate dry clutch which, with the transmission, is in unit with the engine. Other mechanical features of the new Roosevelt are the down-draft manifold, shimless bearings, Permite pistons, double roller chain camshaft drive, four point engine mounting, three unit electrical system with a single button on the steering column controling starting and lighting.

The instrument board includes speedometer, gas gauge, oil-pressure gauge, ammeter and new type coil lock which locks the transmission coincidentally with the ignition. Bodies of the new Roosevelts are roomy and attractively upholstered. Radiator, lamps and other exposed parts are chromium plated. The frame has channel section side members stanchly tied with tubular and channel section cross members. Running boards are of heavy steel.

Commenting on his announcement, Williams declared that the introduction of the Roosevelt is the latest step in the Marmon policy to extend its lines of straight eights to all sales fields.

"The Roosevelt is the result of careful engineering development and a definite factory policy over a period of years," he said. "The advantages of straight eight performance are obvious. Hitherto, they have been obtainable only in higher-priced cars. Now they may be had for less than $1,000."

In addition to the Roosevelt, the Marmon Motor Car Company manuufactures the Marmon "68" and "78" lines, ranging in price from $1,495 to $2,350. The company builds straight eights exclusively.

JEAN HAUCK OF PARIS HERE TO ACQUIRE U. S. PRODUCTS FOR EUROPE

New York, Jan. 17.—A visitor to New York this week is Jean Hauck of Paris, formerly connected with the Brasier and Berliet automobile factories in France in an executive capacity. He arrived in time to attend the New York automobile show and plans to visit Detroit later in the month.

Mr. Hauck said he had laid the foundations before leaving France for an extensive automotive sales organization in Latin European countries, and that he hoped while here to obtain representation for an American car and various accessories. Because of his personal contact with native automotive dealers abroad, he said he hopes to open new markets for American automotive products by operating in the languages and being keyed to the customs of the buying public in the various countries. He expects to establish outlets in France, Belgium, Switzerland, Italy, Spain and Portugal, and in Algiers, Morocco and Tunis in northern Africa.

While here he also hopes to dispose of the American rights to two devices which he said were recently introduced in custom cars abroad. One is a window glass regulator of which the Saoutchik body building firm of Neuilly-Paris has the European rights, and the other a patented door lock, controlled in Europe by the Duvivier body company of Paris.

EDISON CO. TAKES OVER SPLITDORF-BETHLEHEM

Newark, N. J., Jan. 17.—Taking over the management of the Splitdorf-Bethlehem Electrical Company of this city by the Thomas A. Edison Corporation of West Orange was announced last night after a meeting of the Splitdorf directors.

This meeting approved an agreement fixing the terms of the new relationship and elected a new board. Under the new management, Edison men will become officers of Splitdorf under Charles Edison, who will be the new president.

As early as June last, announcement was made that there had been an association of interest between Splitdorf and Edison companies. Under plans made public, Mr. Edison then became a director of the Splitdorf-Bethlehem and Walter Rautenstrauch, then head of Spiltdorf, joined the Edison organization as consulting engineer.

A. L. WEEKS, CRITIC, JOINS ADVERTISERS, INC., STAFF

Special from A. D. N. Detroit Bureau

Detroit, Jan. 17.—A. L. Weeks, widely known critic and author, has joined the staff of Advertisers, Inc., associating himself with Lee Anderson, who heads the organization. Al Weeks is nothing less than an institution in Detroit. He has to his credit a number of plays, serious and humorous; is a dramatic critic of ability and imagination and a witty speaker.

Both he and Mr. Anderson are active members of The Players, Detroit's organization of masculine amateur actors, and frequent contributors to the club's repertoire of plays. Among other things, Mr. Weeks will write this year's show for Chrysler Motors, an annual event that is a feature of the automotive year.

REEVES WILL VISIT PLANTS IN MICHIGAN

New York, Jan. 17.—Alfred Reeves, general manager of the National Automobile Chamber of Commerce, will be in Detroit the early part of next week visiting antomotive plants and consulting with executives on the motor transport outlook for the year. From there he will go to other Michigan and Wisconsin plants and then to the Chicago Automobile Show, January 26 to February 2.

Robert A. Brannigan, patents department manager of the chamber, is making a trip to the Pacific Coast to consult with member companies in that area.

Edward F. Loomis, motor truck secretary of the chamber, is attending the American Good Roads Association Convention in Cleveland and will visit commercial vehicle plants in the Middle West.

OAKLAND NAMES McKAY OKLAHOMA CITY MANAGER

Pontiac, Mich., Jan. 17.—Appointment of A. R. McKay as manager of the Oklahoma City district of the Oakland Motor Car Company was announced today by W. R. Tracy, vice-president in charge of sales of the Oakland Company.

Mr. McKay succeeds Z. R. Kirkpatrick, who has been promoted to the managership of the southwestern regional office of the Oakland Company, located at Kansas City, Mr. Tracy stated.

CITIES SERVICE PROFIT $22,876,755 FOR 1928

New York, Jan. 17.—The Cities Service Company in 1928 had a profit after expenses, interest and preferred dividends of $22,876,755 available for common and reserves, against $22,604,925 in 1927; December, $2,217,467, against $2,010,696. The company declared regularly monthly dividends of 10 cents and ½ of 1 per cent. in common stock on common, and regular monthly preferred and preference dividends.

Upward Employment Trend Is Indicated in U. S. Reports

(Continued from Page 1)

ployed in most instances, but a decrease in employment is expected this month for a temporary period, due to seasonal factory and inventory taking.

Plants in Ohio manufacturing tires maintained high production and employed large forces in December. In Cleveland the automobile industry decreased operations for a short time.

There was a substantial increase in employment in Toledo, especially in automobile and allied industries and metal working plants. All plants were in operation, two reporting overtime schedules.

The larger rubber manufacturing plants in Akron operated overtime. Except for one large tire and rubber manufacturing plant, which operated on a part time basis, all industries in Mansfield reported full time schedules.

While many factories in various parts of Indiana were temporarily closed due to inventory taking, practically all plants in Indianapolis were in operation and a shortage of skilled workers was reported in the automobile industry and metal trades.

In Evansville operations have just been started in a large automobile factory with a force of approximately 1,000 men. Two other large automobile companies expect to increase their forces and build additions to their plants.

A seasonal decrease in employment was recorded in New Jersey, the automobile and tire industries reporting the usual lull at this time of the year. Rubber manufacturing plants in both Trenton and Passaic curtailed operating forces.

8,236 orders for PEERLESS cars at New York ••show••

PEERLESS OFFERS A REAL OPPORTUNITY FOR DEALERS WHO WANT TO MAKE MONEY ••••THIS YEAR••••

Expansion Program of 1928 In N.Y. Continued This Year

By S. E. KENNEDY

ALBANY, N. Y., Jan. 17.—Reports from various cities in this district indicate that the vast expansion program launched last year will be continued during the ensuing year by a number of the principal automotive producing firms. Production in all branches of the industry bids fair to exceed all other years, and changes of benefit are continuing to occur frequently.

The Rome, N. Y., Wire Company division of the General Cable Corporation has awarded a contract for a new addition to its plant, which will be used in extending operations in the magnet wire department. The H. R. Beebe Company of Utica has secured the contract, and construction work will proceed immediately. The new plant addition will be approximately 250 feet by 67 feet, and will provide more than 14,000 square feet of additional floor space. This is the second addition the company has contracted for during recent weeks. The new section will house machinery for producing wire of a high-grade type especially adapted for various uses by the automobile industry.

The new plant of Livermore & Treandly Company, Inc., of Albany, was formally opened to the public during the past week with elaborate exercises presided over by Major Thacher. Among the notables at the ceremony were C. L. Heyniger, sales manager of the Chevrolet Motor Company, and I. W. Thompson, service promotion manager of the same firm. The new factory is four stories high, of fireproof reinforced concrete construction, and takes up approximately 60,000 square feet of floor space.

A sales conference of officials of the Westinghouse Electric and Manufacturing Company was held during the past week in Albany for the purpose of outlining and co-ordinating its activities with its local distributor, the H. C. Roberts Supply Company, Inc. H. F. Roe, Buffalo manager of the firm, was the principal speaker.

The new plant of the Slade Asbestos Corporation, Watervliet, was completed during the past week and the firm is now busy installing equipment prior to starting operations. N. W. Nelson will superintend manufacturing activities in the new factory which will produce brake linings.

ASHTON GENERAL SALES HEAD OF L. C. SMITH

Chicago, Jan. 17.—At a banquet-meeting of all the employees of the L. C. Smith Bearings and Parts Company of Chicago, held at the Lexington Hotel, L. C. Smith, president, announced that E. J. "Cap" Ashton had been appointed general sales and srvic managr.

Mr. Ashton devoted eight years as a jobber salesman for one of the leading New England wholesalers, later founded the Ashton-Deveer Company, general jobbers who still do business in Boston, served as sales promotion man for the Biflex Corporation and more recently as zone manager for the Automotive Equipment Association.

PHILBRIN-PATTERSON CORP. TO OPERATE IN ELIZABETH

Elizabeth, N. J., Jan. 17.—The Philbrin - Patterson Corporation, which has acquired all rights to the Philbrin ingnition system and the Patterson transmission, will manufacture the two lines in one plant in this city, according to J. V. Patterson, president of the new corporation. The Patterson transmission is a preselective gearset with automatic clutch control.

WISCONSIN AXLES

In road work, on long distance hauls, in bus service—Wisconsin Axles succeed because of their ability to withstand heavy loads, road shocks and gruelling speed. They are built for that purpose.

WISCONSIN PARTS CO. Oshkosh, Wis.

THIS TABLE, BROUGHT UP TO DATE, RUNS EVERY FRIDAY IN THE AUTOMOTIVE DAILY NEWS

COMPLETE NOVEMBER, 1928, NEW COMMERCIAL CAR REGISTRATIONS

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States	Autocar	Brockway	Chevrolet	Diamond-T	Fargo	Federal	Ford	G. M. C.	Graham	Indiana	International	Mack	Pierce-Arrow	Relay	Reo	Republic	Rugby	Ruggles	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Yellow	Miscellaneous	Totals	States
Ala.	1		1373	1		35	427	95	141	10	172	21			17	3	2				2	20	24		1	12	2357	Ala.
Arizona			25				52	5	33		9	2			2		2				1	1	1				133	Ariz.
Arkansas			70				83	6	8		15				5						1	3	3				194	Ark.
Calif.	21		135		1	19	762	93	262		43	29		1	89	3	23		19	8	22	6	60	2		141	1739	Calif.
Colo.			96		1		85	10	15		13				2							2	14	1		2	241	Colo.
Conn.	7	8	102	2	5	12	150	36	77		21	31	4	5	32	1	3			8	8	5	9			14	540	Conn.
Delaware			8				29	3	8		5	1	1		2						2						59	Del.
Florida		1	128			1	199	7	17		6	3			19							1	3				385	Fla.
Ga.			43				45		6		7	1			4							1	8			2	117	Ga.
Idaho			21				34	4	15		7				4							1	2			2	90	Idaho
Illinois	5		238	46		1	381	33	92	3	96	14	2		45				1			10	11			48	1026	Ill.
Indiana	4		211	3	4	3	301	31	46	16	36	1	1		13		1			3	7	6	1			3	691	Ind.
Iowa			146	1	4	2	154	14	46	2	50	2		1	19		7				1	9	1	2		5	466	Iowa
Kansas			56	3			101	8	14		22				3	1						3				1	212	Kan.
Kentucky			121	2	1	2	131	15	27	3	37	4		1	5		1				12	1	4	1		10	378	Ky.
Louisiana			76				208	17	26	1	39	5			4						1	1	2				380	La.
Maine			32	1			51	4	27		8				8							3				2	136	Me.
Maryland	7		51	2		4	154	16	31		17	12	1	2	13	4				2		3	5	1		5	330	Md.
Mass.	32	9	164	6	14	5	336	68	100		60	36	4		69		2		9	10	7	7	19	7		19	983	Mass.
Michigan		1	188		9	5	468	36	51		31	4	5		38		1	2			2	7	2	2	8	22	882	Mich.
Minnesota			159			4	293	18	41		71	5			11	1	1				2	2	6			1	615	Minn.
Miss.			61				62	6	6		17	1			4		1				1	1	1				161	Miss.
Missouri	5		165	17	2	1	335	30	69	11	52	20		1	19		1		5		4	8	5			9	759	Mo.
Montana			56				41	5	20		40				5								3				170	Mont.
Neb.			126				104	17	12	4	31			1	5						5	4	2			5	316	Neb.
Nevada			8				10	1	12		1						1									1	34	Nev.
New Hamp.			27			1	40	8	9		3	1			2					1	1	1				1	95	N. H.
New Jersey	14	2	161	7		49	233	42	113		19	56	6	2	51	1			6	4			24			18	808	N. J.
New Mexico			91				23	5	11	2	12				2		4				1		1				152	N. M.
New York	42	126	535	60	5	21	832	154	314		126	140	20	8	151	4	11		6	42	7	22	100	4		178	2908	N. Y.
North Car.	10		292			2	224	11	52	2	16	2			11	6				1	2	7	2			8	648	N. Car.
North Dak.			98				56	21	15		95				7							1				5	298	N. D.
Ohio	9	2	333	5	9	9	482	48	117	15	129	6	2	5	63	3	4		1		4	21	46	6		29	1348	Ohio
Okla.			228	3	4	5	203	18	81		85	6	6	1	14	1						1	10	1		10	677	Okla.
Oregon			20			4	96	13	23		9	2			14	2	3					1	11			7	205	Ore.
Penn.	42	23	464	23	23	12	671	105	227	1	101	47	4	12	103	7	10		43	18	17	32	48	8		67	2108	Penn.
Rhode Isl.	4		30			1	66	11	21		9				17						1	3				3	166	R. Isl.
South Car.			151			2	118	9	20	2	9	3			2						1	2	2			1	322	S Car.
South Dak.			82				46	7	13		51				7		1			1	2					1	211	S. D.
Tenn.			52			5	65	15	16		17	5			6						1	1	2				185	Tenn.
Texas	4		674	3	55	9	738	61	92	4	129	9		5	38		5	3		3	3	23	24			2	1884	Tex.
Utah			28				53	2	12		16	1			5						1		1				119	Utah
Vermont			12		1	1	34	3	8		7	1			2		2			1	3	3					78	Vt.
Virginia	1	2	162	1			208	12	34	1	24	3	4	2	12	4	1		1	1		4	1			5	483	Va.
Wash'gton			44			1	79	8	20		7	6		1	13		1				1	3	6			10	200	Wash.
West Va.			47	4	1	3	80	9	39	4	18			2	11	1	3			4	1	2		1			230	W. Va.
Wisconsin			223	5	5	5	292	22	60		39	2	1		21		2		7	7	3	10	5	2		7	718	Wis.
Wyoming			37				19	4	11		20	2			4		2										99	Wyo.
Dist. of Col.	10	1	23	13			84	9	5	1	2	6	1	2	10				2	1	1		9				180	D. C.
1928 Totals	218	175	7673	208	144	224	9738	1175	2515	82	1849	490	62	52	1003	42	95	5	100	115	128	242	478	38	9	656	27516	1928 Tl.
1927 Totals	159	134	8589	101		257	1444	825	3207	63	1007	378		*28	799	63		8	58	97			473		37	1110	18834	1927 Tl.
1926 Totals	158	131	4920	85		310	10840	157	3196	61	879	456		*35	764	75		18	33	88			530		124	965	23825	1926 Tl.

1927 *Garford at that time, Acme, Pierce-Arrow, Pontiac and Selden are included in the Miscellaneous Column.
1926 *Garford at that time, Acme, Pierce-Arrow and Selden are included in the Miscellaneous Column.

DECEMBER, 1928, NEW COMMERCIAL CAR REGISTRATIONS

States	Autocar	Brockway	Chevrolet	Diamond-T	Fargo	Federal	Ford	G. M. C.	Graham	Indiana	International	Mack	Pierce-Arrow	Relay	Reo	Republic	Rugby	Ruggles	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Yellow	Miscellaneous	Totals	States
Illinois	2		43	44		2	5	350	19	56	1	58	17			18				2	2		5	29			26	679	Ill.

Engine Research and Chassis Engage S.A.E.

Indicator Cards Development and Uses Explained

(Continued from page 1)

Guests were escorted through the building and shown its complete equipment. Brief talks were made by R. W. Ledyard Mitchell, Fred M. Zeder and J. T. Woolson. Motion pictures of various procedures were shown. The Chrysler Engineers' Club acted as hosts.

Friday evening's production session will have serious competition from the society's annual frolic, to be held in the Oriole Terrace. The program of this affair, always elaborate, and invariably frivolous, is largely attended by those engineers who feel the need of relaxation after the strenuous hours of sitting at the more formal and learned sessions at the Book-Cadillac.

"FRAME AND BODY ROAD VIBRATIONS"

By F. F. KISHLINE
Graham-Paige Motors Corp.

The author's conception of a definition of this subject is vibration laterally in the front end of the body, i. e., registered largely through the sense of touch, and the shake of the radiator, head lamps and fenders, which are registered largely through our sense of sight. By this is meant disturbances that do not have their origin in shimmy or tramping periods, but that start from irregular road surface and in some cases continue for a perceptible period after an irregular surface has been passed.

In some designs this condition is apparently due largely to some one point of construction; but, taken as a whole, the usual causes are attributed to the following features of modern design, which have been the natural outgrowth of development to attain other very desirable characteristics: Low-pressure tires, heavier front axles, longer engine compartments, double dropped frames, and freer spring action, all combined with higher average road speeds.

So far this condition has been found to exist in some degree in every modern type of car encountered. The degree of violence in which it is manifested varies widely, as does the frequency of the disturbance.

Quite naturally when there is a relative motion of parts securely attached to the frame, the first thought is that the frame should be stiffened; whereas it has, as a rule, been found that the contrary is required, i. e., that the stiffer the frame, the more violent the shake.

It has been difficult to determine, while driving on the road, whether or not a mild shimmy is existing at the time this occurs, and whether such a phenomenon is brought about by gyroscopic reaction coming from vertical displacement of the front wheels. It has been possible, however, to reproduce the action with the car standing on the floor and without the wheels turning.

The frequency of application of the disturbing force was thus determined and found to correspond closely with the natural bouncing period of the tire.

The vibration has been taken completely out of a car by lowering the air pressure in the tires.

It has been definitely shown that a neutral point exists somewhere in the length of each car when the disturbance is in existence.

This point has not been found to correspond to the position of the rear engine support.

The condition has not been found to respond to the addition of cross members at the forward end of the frame nor to various types of engine supports.

It has not been reduced to a desirable minimum by any one particular change of design, but rather by a careful treatment of the number of things disclosed by painstaking analysis and experiment.

Measurement of a number of makes and types of car has shown the torsional stiffness of resistance of the chassis to be approximately one-third that of the car when the body is fastened securely to the frame.

TEMPLE EXPLOSIVELY ACTUATED DEVICES

By FRANK E. SHEPARD

The Temple principle of explosively actuated devices as described in a paper presented by Frank E. Shepard of Robert Temple, Inc., illustrates the intense energy produced in apparatus and equipment of small dimensions and light weight, and opens a field of great possibilities and varied application in the automotive as well as other commercial industries.

The penetration and fastening of structural steel details in connection with the fabrication and erection of steel structures, pipes, tanks, etc., with particular application to the doweling, pinning or fastening of structural steel details previous to the electric welding of the joints, were demonstrated.

In the automotive industry great opportunities exist in the use of these powerful fastening details instead of reducing the strength of metal structural shapes resulting from punching and riveting methods, the author declared.

A steel pin of one-half-inch diameter driven by the Temple driver through a steel plate one-half inch thick requires a pressure of about seven tons to force the pin out of the one-half-inch plate and from ten to twelve tons pressure to force the one-half-inch diameter pin out of a steel plate three-quarters of an inch in thickness.

An application of this process would be in fastening parts to the chassis or the attaching one metal part to another.

The piercing of steel parts one and one-quarter inches thick, with openings of any cross-section, or the formation of helical openings through steel up to three-quarters of an inch thickness may be accomplished.

Other applications of the Temple Explosively Actuated Devices are as follows:—

1. The fastening of steel parts in under-water construction; the patching of fractured plates, or leaking joints below the water line of steel vessels.

2. The doweling or pinning of structural steel parts previous to electric welding of the joints, thus insuring a fixed alignment of parts during the electric welding process.

3. The formation of die-forgings with increased values in the physical characteristics of the product as to density, elastic limit, tensile strength and accuracy and finish of the surface.

The control of high gas pressures and the production of intense energy for maximum efficiency in apparatus of greatly reduced dimensions and weights, indicate a new field of opportunity in the development of motive power for the automobile, Mr. Shepard pointed out.

DE JUHASZ HIGH SPEED ENGINE INDICATOR

The evolution of the De Juhasz high-speed engine indicator was described in a paper presented by Kalman J. De Juhasz, engineer experiment station, State College, Pa. Mr. De Juhasz conceived the high-speed engine indicator as early as 1915.

His paper described the various steps in its evolution and gave a comprehensive outline of the device in its present perfected form. Photographs of actual installations and a number of actual cards were shown during the reading of the paper, and a general review of the advantages of this device for research and development work on high-speed engines were discussed.

Some of the features of the indicator were given as follows:—

1. It records, by point-to-point method, all kinds of periodically recurring pressure phenomena, up to the highest speeds used in practice. Accurate indicator cards were obtained on an engine running at 6,000 revolutions per minute. The accuracy is the same as that of a normal indicator on an extremely slow-running engine.

2. It is entirely mechanical in action, without any optical or electrical complication, and draws the card with pencil on paper.

3. It is of light weight and of small over-all dimensions; therefore is easily applicable to any engine without interfering with its regular operation.

CHROMIUM PLATING PROGRESS

A paper presented by W. M. Phillips of General Motors Corporation and M. F. Macauley of the Oakland Motor Car Company outlined the progress of chromium plating in the industry and pointed out its advantages and limitations.

Since the successful plating of chromium on steel can be accomplished only after the part to be plated has first been properly plated with some other metal such as copper or nickel, the authors presented a short summary of the advancement made during the last ten years in the methods of plating with copper and nickel before discussing the development and advancement of chromium plating. Comparisons were made between the results obtained from manually operated plating tanks and semiautomatic and full automatic plating machines and the improvements made as these processes were developed were pointed out.

In the early stages of the development of chromium plating satisfactory chromium plating solutions were obtained by dissolving chromium anhydride, CrO-3, in water to which was added a small amount of chromium sulphate, but the solutions were effective for a short time only, mainly on account of the presence of chromium sulphate. It was also found that the temperature and the current density used in plating were important factors and that proper cleaning of the nickel surface was essential because, if the solution was too strongly alkaline, the chromium either deposited with iridescent blotches or as a gray, burnt deposit, or else peeled entirely. It was therefore necessary to do better polishing work on the base metal and better buffing work on the nickel surface.

Proper polishing, the authors declared, is the secret of successful plating, because the ultimate finish is no better than the finish given to the base metal. To eliminate the polishing cost would decrease the total finishing cost by about 75 per cent., according to the author. This is the aim of all manufacturers, and they have met with success in some instances. One large company presses the part from highly polished steel, keeping the dies in such condition that no polishing is required after forming the piece.

In conclusion, the proper type of anode to be used in chromium plating solutions was discussed. Inspection methods to make certain that a part has been chromium plated completely are mentioned, and the uses of chromum plating to reduce wear were enumerated.

FLEMING MFG. CO. FORMED TO HANDLE SMALL TOOL DIVISION IN WORCESTER

Worcester, Mass., Jan. 17.—To adequately handle the rapid expansion on two radically different lines of automotive products, the Fleming Machine Company has turned over to the newly formed Fleming Manufacturing Company, Inc., of 135 Stafford St., the small tool division of the Fleming Machine Company.

George W. Fleming, a former director of the Automotive Equipment Association, and chairman of the International Trade Committee of the National Standard Parts Association, is president of the new company. Steven B. Wilson, formerly president of Wilson & Co., sales manager of Service Station Equipment Company and assistant sales manager of McCord Radiator Company, is vice-president and general manager. Charles F. Davis, president of Stafford Iron Works, Inc., of Worcester, is treasurer.

The Fleming Manufacturing Company, Inc., will manufacture and market the Fleming line of precision tools, the Fleming "Aristocrat" screw driver, and Marnall steel lubricating pits. All these lines will be marketed as before through established jobbing channels.

LOUISVILLE SHOW READY FOR OPENING SATURDAY

Louisville, Ky., Jan. 17.—J. Garland Lea, secretary of the Louisville Automobile Dealers' Association, reports that plans for the 1929 Louisville Automobile Show, to open on January 19 and run through January 26, are complete, with indications for a large attendance.

A feature of the decorations will be an enormous painting, 200 feet wide, across the north end of the armory, depicting a panorama view of the Louisville skyline as it is expected to appear ten years hence, and as seen when coming in from the North to the "gateway to the South."

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MAJOR SPECIFICATIONS AND MECHANICAL DETAILS OF

Make and Model	Capacity—tons	Chassis price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gearset	Location	No. Spds. for.	Rear Axle	Final Drive	Reduction in Low	Brakes, foot	Brakes, hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Am. La France Chief	2–2½	2850	Buda D W 6	6	3¾x5	33.7	F P	Zen	Vac	Rem	Own	C	4	Tim	Wo	51.2	4	R	156	5600	32x6	32x6 D
**Am. La France W	3–4	3950	Own 2 R	4	4¼x6	28.9	P&S	Zen	Vac	A B	Own	C	4	Own	D R	47.4	D	R	160	7200	S 36x5	S 36x5 D
Am. La France S	4–4½	5200	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	Wo	54.4	D	R	165	8900	S 36x6	S 36x6 D
Am. La France V	5	5500	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	Wo	54.4	D	R	165	9800	S 36x6	S 40x6 D
Am. La France Z	6½	5750	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	Wo	63.5	D	R	165	10000	S 36x7	S 40x7 D
Am. La France U	7½	6000	Own 5 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	—	63.5	D	R	165	10500	S 36x7	S 40x8 D
Am. La France 14 R	5	6000	Own 14 R	4	4¾x6	36.2	P&S	Zen	Vac	A B	Own	C	4	Own	D R	34.3	D	R	226	9100	40x8	40x8 D
Am. La France 16 R	5	6500	Own 16 R	6	4½x6	105	P&S	Zen	Vac	A B	Own	C	4	Own	D R	32.8	4	R	226	10400	40x8	40x8 D
Autocar A	1½	2700	Own A	4	4¼x5½	28.9	C S	Str	Vac	L-N	Br-L	U	4	Tim 5623 Px	Sp	28.7	4	4	142	3900	32x6	32x6
Autocar A	2	3000	Own A	4	4¼x5½	28.9	C S	Str	Vac	L-N	Br-L	U	4	Tim 63100	Wo	33.4	4	4	142	4050	S 34x4	S 34x7
†Autocar H	2½	3750	Own Y	4	4¼x5½	28.9	C S	Str	Gra	A B	Own Y	C	4	Own H	D R	56.3	R	R	114	5200	S 36x5	S 36x8
Autocar T	2½	4900	Own T	6	4¼x4¾	43.5	Pb	Str	Vac	A B	Own T	U	4	Own H	D R	40.2	R	D	177	6800	34x7	34x7 D
†Autocar H	3–3½	4100	Own Y	4	4¼x5½	28.9	C S	Str	Gra	A B	Own J	C	4	Own M	D R	63.6	R	R	114	6000	S 34x5	S 36x10
†Autocar H	3–3½	4350	Own W	6	4 x4¾	38.4	Pb	Str	Vac-Gra	A B	Own T	U	4	Own J	D R	55.2	R	R	114	6200	S 34x5	S 36x10
†Autocar M	5	4650	Own M	4	4½x5½	32.4	C S	Str	Gra	A B	Own B	C	4	Own M	D R	72.1	R	R	120	7200	S 34x6	S 36x12
Autocar M	5	4950	Own T	6	4¼x4¾	43.5	Pb	Str	Vac	A B	Own	C	4	Own M	D R	72.1	R	D	162	7300	S 34x6	S 36x12
Brockway Junior	1	1195	Wis C	4	3¾x5	22.5	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36001	Sp	21.27	4W	Tr	130	3100	30x5	30x5
Brockway J F	1	1195	Wis F	6	3¼x4¼	25.4	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36001	Sp	21.3	4W	Tr	137	3450	30x5	30x5
Brockway C J B F	1½	1475	Wis F	4	3¼x4¼	25.4	Pb	Zen	Vac	A W	Br-L 20	U	3	Col 54030	Sp	21.3	4W	Tr	149	3650	32x6	32x6
Brockway E	1½	1765	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	L-N	Br-L 30	U	3	Col 55001	Sp	21.0	4W	Tr	139½	3650	32x6	32x6
Brockway E N	1½	1965	Wis N	6	3½x4¼	29.4	Pb	Zen	Vac	Aut	Br-L 35	U	4	Col 55001	Sp	31.3	4W	Tr	155¾	4400	32x6	32x6
Brockway S	2	2450	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	L-N	Br-L 35	U	4	Wis 4610	D R	38.79	R	Tr	150¼	5100	S 34x4	S 34x8
Brockway S Y	2	2950	Wis Y	6	3⅜x5	27.3	Pb	Zen	Vac	L-N	Br-L 35	U	4	Wis 4610	D R	35.3	4W	Tr	151¾	4950	32x6	34x7
Brockway K*	3	3300	Con K	4	4⅛x5¼	27.2	Pw	Zen	Vac	Eis	Br-L 35	C	4	Tim 65600 D	Wo	41.5	R	R	154⅛	5855	S 36x5	S 36x10
Brockway K R	3	3625	Con L	4	4½x5½	32.4	Pw	Zen	Vac	E S	Br-L 55	C	4	Tim 65700 S	Wo	36.38	R	D	160⅜	6290	S 36x5	S 36x10
Brockway K W	3	3950	Wis H	6	4 x5	38.2	Pb	Zen	Vac	L-N	Br-L 51	U	4	Wis 68300	D R	33.7	R	D	170	6920	34x7	D 34x7
Brockway R*	4	4200	Con L	4	4½x5½	32.4	Pw	Zen	Vac	Eis	Br-L 55	C	4	Tim 66600	Wo	46.8	R	R	164	7890	S 36x5	S 36x12
Brockway T	5–7	5200	Con B 7	4	5 x6	40.0	Pw	Zen	Vac	Eis	Br-L 60	C	4	Tim 68700	Wo	53.5	R	D	175	10065	S 36x6	S 40x14
Chevrolet	½	395	Own	6	3⅛x3¾	—	Pb	Car	P	Rem	Own	U	3	Own	Sp	13.87	4	R	107	1695	30x4.50	30x4.50
Chevrolet	1½	495	Own	6	3⅛x3¾	—	Pb	Car	P	Rem	Own	U	4	Own	Sp	33.47	4	R	124	2170	30x5	30x5
Day Elder M	1	1345	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Ful DU-10	U	3	Col 35000	B	23.89	R	R	131	3100	30x5	30x5
Day Elder G-6	1½	2050	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Ful DU-10	U	3	Tim 5620	B	29.30	R	R	144	3900	30x5	32x6
Day Elder H	2	2500	Buda WTU	4	3¾x5⅛	22.5	Pb	Zen	Vac	Rem	Ful KU-10	U	4	Tim 63702 D	Wo	30.64	R	R	144	4400	S 34x4	S 34x7
Day Elder H B-6	2	2500	Con 16-C	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Ful KU-10	U	4	Tim 5620	B	27.32	R	R	144	4400	32x6	34x7
Day Elder I	2½	3300	Buda KBU	4	4 x5¼	25.6	Pb	Zen	Vac	Rem	Ful GU-12	U	4	Tim 65600 D	Wo	44.40	R	R	150	5700	S 36x4	S 36x8
Day Elder J-6	3	3900	Buda DW6	6	3⅜x5	33.7	Pb	Zen	Vac	Rem	Ful GU-12	U	4	Tim 65600 D	Wo	37.20	R	R	156	6500	36x6	36x6 D
Day Elder K	4	4475	Bud Y B U	4	4½x6	32.4	Pb	Zen	Vac	Eis	Ful R	C	4	Tim 66600 D	Wo	49.60	R	R	162	8500	S 36x5	S 36x12
Day Elder L	5–6	5050	Bud B B U	4	5 x6½	40.0	Pb	Zen	Vac	Eis	Ful H	C	4	Tim 67700 D	Wo	64.60	R	R	162	10000	S 36x6	S 40x7 D
Diamond T 150	1	1095	Con 18 E	6	3⅜x4	27.3	Pb	Zen	Gra	Aut	Cov	U	3	Col	Sp	18.6	4	D	127½	....	30x5	30x5
Diamond T 302	2	1650	Her WXB	6	3¾x4½	33.7	Pb	Zen	Gra	Aut	Cov	U	4	Cla	Sp	33.1	4	D	157¾	....	32x6	32x6 D
Durant Com. Chassis	½	495	Con	4	3⅛x4¼	18.2	Pb	Til	Vac	Aut	Own	A	3	Own	Sp	16.16	4	4	107	1670	28x4.75	28x4.75
Fargo Packet	½	545	Own	4	3⅝x4⅛	21.03	Pb	Car	Vac	Rem	Own	U	3	Own	Sp	14.29	4	Tr	...	1885	4.75x20	4.75x20
Fargo Clipper	¾	725	Own	6	3⅛x4¼	23.43	Pb	Str	Vac	Rem	Own	U	3	Own	Sp	14.29	4	Tr	...	2325	5.50x18	5.50x18
*Ford A	1½	540	Own	4	3⅞x4¼	24.0	P&S	Zen	Gra	Own	Own	U	3	Own	Wo	*15.95	4	4	131½	2250	30x5	32x6
F. W. D.—H	2	3300	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Cotta	C	4	Own	St	38.1	4	R	121	5300	34x7	34x7
F. W. D.—B	3	4200	Own	4	4⅜x5½	36.1	Pb	Strom	Gra	Eis	Own	C	3	Own	St	35.6	4	R	124	6460	36x6 S	36x6 S
F. W. D.—B-5	3	4525	Own	4	4⅜x5½	36.1	Pb	Strom	Gra	Eis	Own	C	5	Own	St	86.6	4	R	132	6800	36x6 S	36x6 S
F. W. D.—U 6	3½	4575	Wak	6	4 x4¾	38.6	Pb	Zen	Vac	A B	Own	C	5	Own	St	88.6	4	R	148	7200	36x6 S	36x6 S
F. W. D.—M	3½–5	5000	Wak	6	4¼x4¾	43.35	Pb	Zen	Gra	Eis	Own	C	5	Own	St	88.6	4	R	132	7600	36x8 S	36x10 S
F. W. D.—M F	3½–5	5000	Wak	6	4¼x4¾	43.35	Pb	Zen	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7775	36x8 S	36x10 S
F. W. D.—H T	2	3900	Wis S U	4	4 x5	25.6	Pb	Zen	Vac	Eis	Br-L	C	7	Own	St	84.7	4	R	120	6000	36x8	36x8
F. W. D.—B T	3	4742	Own	4	4⅜x5½	36.1	Pb	Strom	Vac	Eis	Own	C	5	Own	St	101.0	4	R	133¾	7700	40x7 S	40x5 S D
F. W. D.—U 4	3	4575	Own	4	4⅜x5½	36.1	Pb	Strom	Vac	Eis	Own	C	5	Own	St	88.6	4	R	148	7000	36x6 S	36x6 S
F. W. D.—X 6	6	6500	Wak	6	4¼x4¾	43.35	Pb	Zen	Vac	A B	Own	C	5	Own	St	88.6	4	4	170	9500	36x8	36x8
Graham Bros. Mer. Ex.	½	665	Dodge	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Own	U	3	Own	Sp	15.2	4	D	110	1965	29x5.00 B	29x5.00 B
Graham Bros. D E	¾	775	Dodge	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Own	U	3	Own	Sp	16.2	4	D	120	2510	31x5.25 B	31x5.25 B
Graham Bros. B E	1¼	995	Dodge	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Warner	U	4	Own	Sp	23.8	4	D	130	2920	30x5	30x5
Graham Bros. I E	1¼	1065	Dodge	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Warner	U	4	Own	Sp	23.8	4	D	140	2955	30x5	30x5
Graham Bros. M E	1¾	1345	Dodge	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Own	U	4	Own	Sp	36.8	4	D	150	3695	32x6	32x6
Graham Bros. L E	1¾	1415	Dodge	6	3⅜x3⅞	27.3	Pb	Stw	Vac	N E	Own	U	4	Own	Sp	36.8	4	D	165	3810	32x6	32x6
Graham Bros. E D	2	1445	Dodge	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	114	3725	32x6	34x7
Graham Bros. J E	16 Pas	1890	Dodge	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	36.8	4	D	165	4045	32x6	34x7
Graham Bros. Y E	21 Pas	1820	Dodge	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	165	4205	32x6	34x7
Graham Bros. O E	2	1545	Dodge	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	150	3930	32x6	34x7
Graham Bros. T E	2	1615	Dodge	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	41.4	4	D	165	4070	32x6	34x7
Graham Bros. G E X	3	1745	Dodge	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	46.3	4	D	135	4225	32x6	32x6 D
Graham Bros. R E X	3	1775	Dodge	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	46.3	4	D	165	4520	32x6	32x6 D
Graham Bros. H E X	3	1845	Dodge	6	3⅜x4½	27.3	Pb	Zen	Vac	N E	Own	U	4	Own	Sp	46.3	4	D	185	4715	32x6	32x6 D
Gramm 263-N	1–1¼	1485	Lyc S	6	3¼x4½	25.3	Pb	Zen	Gra	Aut	Cov	U	3	Eat 1002	Sp	21.3	D	R	153	7100	S 36x5	S 36x10
Gramm 363-N	1½	1485	Lyc S	6	3¼x4½	25.3	Pb	Zen	Gra	Aut	Cov	U	3	Eat 1002	Sp	21.3	D	R	153	7100	S 36x5	S 36x10
Gramm 463-N	2	1885	Lyc S	6	3¼x4½	25.3	Pb	Zen	Gra	Aut	Cov	U	3	Eat 1504	Sp	25.3	D	R	153	7600	S 36x5	S 36x12
Gramm 564-N	2½	2940	Lyc T S	6	3⅞x5	36.2	Pb	Zen	Gra	Aut	Ful G U	U	3	Wis 6617	D R	25.4	D	R	153	7600	S 36x5	S 36x12
Gramm 35	3	4160	Her L	4	4½x5¾	32.4	Pb	Zen	Vac	Aut	Ful H	C	8	Wis 8800	D R	115.5	D	R	153	7600	S 36x5	S 36x12
Gramm 35	3	4160	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful H	C	8	Wis 8800	D R	115.5	D	R	153	8700	S 36x6	S 36x14
Gramm 38—Low Bed	3	4160	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful GU	C	8	Wis 67310	D R	33.1	D	R	133	3840	32x6	34x7
Gramm 45	4	4735	Her L	4	4½x5¾	32.4	Pb	Zen	Vac	Aut	Ful H	C	8	Wis 1450	D R	128.0	D	R	150	4800	32x6	32x6 D
Gramm 45	4	4735	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful H	C	8	Wis 1450	D R	128.0	D	R	153	7100	S 36x5	S 36x10
Gramm 48—Low Bed	4	4735	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful GU	U	4	Wis 1250	D R	34.2	D	R	133	3585	30x5	32x6
Gramm 60	5	5370	Her G	4	4¾x5¾	36.1	Pb	Zen	Vac	Aut	Ful H	C	8	Wis 1700	D R	133.4	D	R	153	9700	S 36x6	S 36x14
Gramm 60	5	5370	Lyc T S	6	3⅞x5	36.2	Pw	Zen	Vac	Aut	Ful GU	U	8	Wis 1700	D R	133.4	D	R	153	9700	S 36x4	S 36x14
GMC T 11	½	585	Pontiac	6	3⅛x3⅞	26.3	Pb	Mar	P	Rem	Own	U	3	Own	Sp	14.47	4	R	109⅜	1835	29x4.75 B	29x4.75 B
GMC T 19	1	745	Pontiac	6	3⅛x3⅞	26.3	Pb	Mar	P	Rem	Own	U	4	Own	Sp	37.3	4	R	126½	2525	30x5	30x5
*GMC T 30A	1½	1395	Buick Std	6	3⅛x4⅜	26.3	Pb	Mar	P	Rem	Own	U	4	Eat	Sp	28.6	4	D	136	3830	32x6.00 B	34x7
*GMC T 42A	2	1685	Buick Std	6	3⅛x4⅜	26.3	Pb	Mar	P	Rem	Own	U	4	Own	Sp	33.37	4	D	136	4270	32x6.75 B	36x8
†*GMC T 60A	3	2585	Buick Mst	6	3⅜x5	31.5	Pb	Mar	P	Rem	Own	U	4	Tim 65706 N	Wo	44.8	4	D	140	6285	36x5 S	36x10 S
†*GMC T 80A	4	2765	Buick Mst	6	3⅜x5	31.5	Pb	Mar	P	Rem	Own	U	4	Tim 65706 N	Wo	52.5	4	D	140	6455	36x5 S	36x12 S
*GMC K 102A	5	5220	Own 89	4	4½x6½	32.4	Pw	Mar	Vac	Eis	Own	C	7	Tim 67700	Wo	86.3	R	R	160	9295	36x6 S	40x14 S
*Hahn 34	1	1345	Her O	4	4 x5	25.6	Pb	Zen	Vac	Aut	Br-L 31	U	3	Eat 1002	Sp	—	R	R	138	3100	30x5	30x5
*Hahn 34	1½	2080	Her O	4	4 x5	25.6	Pb	Zen	Vac	Aut	Br-L 31	U	3	Eat 1504	Sp	—	R	R	150	3750	32x6	32x6
*Hahn 44	2	2250	Her O	4	4 x5	25.6	Pb	Zen	Vac	Aut	Br-L 31	U	3	Eat 1504	Sp	—	R	R	150	4100	32x6	34x7
Hahn 465	2	2740	Con 6 B	6	3¾x5	33.5	Pb	Zen	Vac	Aut	Br-L 35	U	4	Eat 1504	Sp	—	R	R	160½	4300	32x6	34x7
Hahn 54	2½	3300	Her L	4	4½x5¾	32.4	Pb	Zen	Vac	R B	Br-L 51	U	4	Tim 65000	Wo	—	R	R	144	5600	36x4 S	36x8 S
†Hahn 56	2½	3440	Con 6 B	6	3¾x5	33.75	Pb	Zen	Vac	Rem	Br-L 51	U	4	Eat 2252	Sp	—	R	D	160	5300	32x6	32x6 D
Hahn L	3	3600	Her L	4	4½x5¾	32.4	Pb	Zen	Vac	R-B	Br-L 51	U	4	Tim 65704	Sp	—	R	R	149	5900	36x5 S	36x5 S D
Hahn 76	3½	4790	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Vac	L-N	Br-L 51	U	4	Tim 65704	Wo	—	R	R	196	6500	34x7	34x7 D
Hahn M	4	4250	Her G	4	4¾x5¾	36.5	Pb	Zen	Vac	R B	Br-L 60	C	4	Tim 66700	Wo	—	R	R	160	7600	36x5 S	36x12 S
Hahn R	5	5100	Her G	4	4¾x5¾	36.5	Pb	Zen	Vac	R B	Br-L 60	C	4	Tim 66700	Wo	—	R	R	162	8800	36x6 S	40x6 S D
Hahn N	6	5200	Her G	4	4¾x5¾	36.4	Pb	Zen	Vac	R B	Br-L 60	C	4	Tim 66700	Wo	—	R	R	162	9200	36x6 S	40x6 S D
Hahn K B L	25 Pas	4300	Her W X C	6	4 x4½	38.4	Pb	Zen	Vac	L-N	Br-L 51	U	4	Wis 67310	D R	—	R	R	204	5600	32x6	32x6 D
Hahn K B H	29 Pas	5000	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	Vac	L-N	Br-L 51	U	4	Wis 67310	D R	—	R	R	220	6400	34x7	34x7 D
Hahn L B	33 Pas	6000	Con 15 H	6	4½x5¾	48.6	Pb	Zen	Vac	L-N	Br-L 60	U	4	Wis 1251 K	D R	—	R	R	247	9000	38x7	38x7 D
Indiana 200	1	1195	Wis F	6	3¼x4½	25.35	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 36000	Sp	20.71	4	Tr	137	3400	30x5	32x6
Indiana 300	1½	1475	Wis F	6	3¼x5¼	25.35	Pb	Zen	Vac	Aut	Br-L 20	U	3	Col 54030	Sp	21.26	4	Tr	149	3650	30x5	32x6
Indiana 111 X	2	1850	Her Ox	4	4 x5	25.6	Pb	Str	Vac	Eis	Br-L 35	U	4	Cla B 504	Sp	36.60	R	Tr	120	3830	32x6	32x6 D
Indiana 400	2	2495	Wisc Y	6	3⅜x5	27.34	Pb	Str	Vac	Aut	Br-L 35	U	4	Cla B 506	Sp	30.33	4	Tr	157	4800	32x6	34x7
Indiana 115 A	2½	2740	Her Ox	4	4 x5	25.6	Pb	Str	Vac	Eis	Br-L 35	U	4	Cla B 720	Sp	42.80	R	Tr	132	5000	32x6	34x7 D
Indiana 615 A	2½	3070	Wis Y	6	3⅜x5	27.34	Pb	Str	Vac	Eis	Br-L 35	U	4	Cla B 720	Sp	30.33	R	Tr	136	5190	32x6	34x7 D
Indiana 126	3	3495	Her L	4	4½x5¾	32.4	Pb	Str	Vac	Eis	Br-L 557	C	7	Tim 65074	Sp Wo	80.7	R	Js	162½	7400	36x5	36x10 S
Indiana 127	3	3190	Her K	4	4¼x5¾	28.9	Pb	Str	Vac	Eis	Br-L 51	U	5	Cla B 720	Sp	41.72	R	R	141	6490	32x6	34x7 D
Indiana 626	3	4185	Wis H	6	4 x5	38.40	Pb	Str	Vac	Eis	Br-L 55	C	7	Tim 65074	Sp Wo	80.7	R	Js	168½	7625	36x6 S	36x10 S

*See special notations. †See special notations.

1928 COMMERCIAL CARS BUILT IN THE UNITED STATES

Make and Model	Capacity—tons	Chassis price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gearset	Location	No. Spds. for.	Rear Axle	Final Drive	Reduction in Low	Brakes, foot	Brakes, hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Indiana 627	3	3725	Wis H	6	4 x5	38.40	Pb	Str	Vac	Aut	Br-L 55	U	4	Cla B 720	Sp	42.80	R	R	162½	6500	36x5 S	36x10 S
Indiana 628	3	4355	Wis H	6	4 x5	38.40	Pb	Str	Vac	Aut	Br-L 55	U	4	Cla B 720	Sp	37.45	R	R	216¾	6585	34x7	34x7 D
Indiana 127 A	3	3375	Her K	4	4¼x5¾	28.9	Pb	Str	Vac	Eis	Br-L 51	U	5	Cla B 720	Sp	41.72	R	R	141	6800	32x6	34x7 D
Indiana 627 A	3	3690	Wisc H	6	4 x5	38.40	Pb	Str	Vac	Eis	Br-L 51	U	5	Cla B 70	Sp	41.72	R	R	147	6800	32x6	34x7 D
Indiana 138	4	4380	Her L	4	4½x5¾	32.4	Pb	Str	Vac	Eis	Br-L 60	C	7	Tim 66700 D	Wo	83.1	R	R	162½	7850	36x5	36x12 S
Indiana 638	4	4955	Wisc H	6	4 x5	38.4	Pb	Str	Vac	Eis	Br-L 60	C	7	Tim 66700 D	Wo	83.1	R	R	168½	8100	36x5	36x12 S
Indiana 41	5	5460	Her G	4	4¾x5¾	36.1	Pb	Str	Vac	Eis	Br-L 60	C	7	Tim 66700 D	Wo	95.0	R	R	172	9600	36x6	40x12 S
Int. Harvester Sp. Del.	¾	695	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	Rem	Mec	U	3	Eat 502 R	Sp	15.1	4	4	124	2200	30x5.25	30x5.25 P
Int. Harv. 6 Spd. Spec.	1	795	Wak X A	4	3½x4½	19.6	Pb	Zen	Vac	Rem	Mec	U	3	Eat 1124	Sp	*52.6	4	4	124	2430	30x5	30x5 P
Int. Harvester S-24	1¼	1135	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	Rem	Own	U	3	Eat 1002	Sp	21.3	4	4	130	3200	32x4½	32x4½ P
Int. Harvester S-26	1¼	1285	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	3	Eat 1002	Sp	21.3	4	4	130	3250	32x4½	32x4½ P
Int. Harvester SF-34	1½	1425	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	Rem	Own	U	3	Eat 1502	Sp	22.6	4	4	140	3520	30x5	30x5 P
Int. Harvester SF-36	1½	1575	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	3	Eat 1502	Sp	22.6	4	4	140	3570	30x5	30x5 P
Int. Harvester SL-34	1½	1525	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	Rem	Own	U	3	Eat 1502	Sp	22.6	4	4	160	3595	30x5	30x5 P
Int. Harvester SL-36	1½	1675	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	3	Eat 1502	Sp	22.6	4	4	160	3645	30x5	30x5 P
Int. Harvester SD-44	2	1565	Lyc C T	4	3¾x5	22.5	Pw	Zen	Vac	A B	Own	U	4	Eat 2002	Sp	40.6	4	4	117	3700	30x5	32x6 P
Int. Harvester SD-46	2	1715	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	A B	Own	U	4	Eat 2002	Sp	40.6	4	4	117	3750	30x5	32x6 P
Int. Harvester SF-46	2	1925	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Own	U	4	Eat 2002	Sp	40.6	4	4	140	4000	32x6	34x7
Int. Harvester 54-C	2½	3200	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Own A M 428	Ch	51.8	R	D	140	6400	36x5	36x10
Int. Harvester 54	2½	3550	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Eat 54 55000	D R	53.7	R	D	140	6345	36x5	36x8
Int. Harvester 74-C	3½	4550	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Own A M 427	Ch	*86.0	R	D	154	8715	36x6	40x12
Int. Harvester 74	3½	4550	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Eat 74 100000	D R	61.6	R	D	160	8175	36x6	40x12
Int. Harvester 104-C	5	4800	Own	4	4¼x5	28.9	C S	Zen	Gra	R B	Own	U	4	Own A M 427	Ch	86.0	R	D	154	8890	36x6	40x14
Int. Harvester HS-54	2½	3850	H-S 151	4	4¼x5½	28.9	Pb	Zen	Vac	R B	Own	U	5	Eat 54 6500	D R	60.5	4	4	*148	7780	36x5	36x8
Int. Harvester HS-54-C	2½	3850	do 151	4	4¼x5½	28.9	Pb	Zen	Vac	R B	Own	U	5	Own A M 427	Ch	63.8	4	4	*148	7935	36x5	36x10
Int. Harvester HS-74	3½	4850	do 152	4	4¾x5½	36.1	Pb	Zen	Vac	R B	Own	U	5	Eat 74 100000	D R	70.5	4	4	*160	9690	36x6	40x12
Int. Harvester HS-74-C	3½	4850	do 152	4	4¾x5½	36.1	Pb	Zen	Vac	R B	Own	U	5	Own A M 427	Ch	79.1	4	4	*160	10290	36x6	40x12
Int. Harv'st'r HS-104-C	5	5500	do 152	4	4¾x5½	36.1	Pb	Zen	Vac	R B	Own	U	5	Eat 74 100000	D R	90.5	4	4	*160	10455	36x6	40x12
*Larrabee 20	1	1595	Con 16 C	6	3⅜x4⅜	27.34	Pb	Zen	Gra	Rem	Br-L	U	3	Cal	Sp	5.13	4	D	142	4170	30x5	30x5
*Larrabee 30	1½	1875	Con 16 C	6	3⅜x4⅜	27.34	Pb	Zen	Gra	Rem	Br-L	U	3	Cal	Sp	5.13	4	D	161	4550	32x6	32x6
*Larrabee 40	2	2965	Con 16 R	6	4 x4⅛	38.4	Pb	Zen	Gra	Rem	Br-L	U	4	Wisc	D R	5.35	4	D	176	5950	32x6	32x6 D
*Larrabee 50	2½	3285	Con 16 R	6	4 x4⅛	38.4	Pb	Zen	Gra	Rem	Br-L	U	4	Wisc	D R	5.35	4	D	183	6030	32x6	32x6 D
*Larrabee 60	3	3980	Con 18 R	6	4 x4½	38.4	Pb	Zen	Gra	Rem	Br-L	U	4	Tim	Wo	5.35	4	D	195	7140	34x7	34x7 D
*Larrabee 70	3½	4600	Con 20 R	6	4⅛x4¾	—	Pb	Zen	Gra	Rem	Br-L	A	7	Tim	Wo	9.5	4	D	205	7740	34x7	34x7 D
Mack A B	1½	3000	Own	4	4 x5	25.6	S P	Str	Gra	Spf	Own	U	4	Own	Ch	34.44	D	R	146½	5350	36x4	36x3½ D
Mack A B	1½	3450	Own	4	4 x5	25.6	S P	Str	Gra	Spf	Own	U	4	Own	D R	36.8	R	D	or	5650	36x4	36x6
Mack A B	2	3300	Own	4	4¼x5	28.9	S P	Str	Gra	Spf	Own	U	4	Own	Ch	34.44	D	R	164½	5450	36x4	36x3½ D
Mack A B	2	3750	Own	4	4¼x5	28.9	S P	Str	Gra	Spf	Own	U	4	Own	D R	36.38	R	D	on all	5800	36x4	36x6
Mack A B	2½	3400	Own	4	4¼x5	28.9	S P	Str	Gra	Spf	Own	U	4	Own	Ch	43.02	D	R	these	5500	36x4	36x4 D
Mack A B	3	3850	Own	4	4¼x5	28.9	S P	Str	Gra	Spf	Own	Js	4	Own	D R	44.9	R	D	models	5950	36x4	36x8
Mack A C	3½	4950	Own	4	5 x6	40.0	S P	Str	Gra	Spf	Own	Js	4	Own	Ch	48.37	Js	R	156	9100	36x5	40x5, 40x10 S
Mack A C	5	5500	Own	4	5 x6	40.0	S P	Str	Gra	Spf	Own	Js	4	Own	Ch	53.31	Js	R	168 or	9550	36x6	40x6 D
Mack A C	7½	6000	Own	4	5 x6	40.0	S P	Str	Gra	Spf	Br-L 35	U	4	Own	Ch	67.38	Js	R	180	10050	36x7	40x7 D
Mack B B	1½	3500	Own	4	4¼x5	28.9	P&S	Str	E	N E	Own	U	4	Own	S R	*23.81	4	D	165½	6450	32x6	32x6 D
*Mack A B	1½–2	3000	Own	4	4¼x5	28.9	P&S	Str	Gra	Spl	Own	U	4	Own	Ch	*34.4	R	D	146½	5400	36x4	36x6 S
Mack A B	2½–3	3400	Own	4	4¼x5	28.9	P&S	Str	Gra	Spl	Own	U	4	Own	Ch	*43.9	R	D	146½	5650	36x4	36x8 S
Mack B J	3–4	5800	Own	6	4¼x5	43.35	P&S	Str	E	N E	Own	C	4	Own	D R	*22.40	4	D	168½	8950	36x8	36x8 D
Mack A K	3½–5	4850	Own	4	5 x6	40.00	P&S	Str	Gra	Spl	Own	C	4	Own	D R	*45.3	4	D	162	8900	36x5	36x5 D
Mack A C	3½–5	4950	Own	4	5 x6	40.00	P&S	Str	Gra	Spl	Own	J	4	Own	Ch	*48.4	Js	R	156	9100	36x5	40x10 S
Mack A C	5½–7	5500	Own	4	5 x6	40.00	P&S	Str	Gra	Spl	Own	J	4	Own	Ch	*57.41	Js	R	156	9550	36x6	40x12 S
Mack A C	7½	6000	Own	4	5 x6	40.00	P&S	Str	Gra	Spl	Own	J	4	Own	Ch	*67.1	Js	R	156	10050	36x7	40x14 S
Mack A B Tractor	5–6	3400	Own	4	4¼x5	28.9	P&S	Str	Gra	Spl	Own	U	4	Own	Ch	*51.1	D	R	122½	5700	36x4	36x8 S
Mack A C Tractor	7–10	4950	Own	4	5 x6	40.00	P&S	Str	Gra	Spl	Own	J	4	Own	Ch	*58.00	Js	R	128	9150	34x5	36x5 D
Mack A C Tractor	11–14	5500	Own	4	5 x6	40.00	P&S	Str	Gra	Spl	Own	J	4	Own	Ch	*62.2	Js	R	128	9600	34x6	36x6 D
Mack A C Tractor	15 Pas	6000	Own	4	5 x6	40.00	P&S	Str	Gra	Spl	Own	J	4	Own	Ch	*73.5	Js	R	128	9950	34x7	36x7 D
Mack A B Bus C T	15 Pas	4650	Own	4	4¼x5	28.9	P&S	Str	Vac	N E	Own	U	4	Own	D R	—	R	D	196	7200	Opt.	Opt.
Mack A B Bus C T	29 Pas	4750	Own	4	4¼x5	28.9	P&S	Str	Vac	N E	Own	U	4	Own	D R	—	R	D	225¼	7300	Opt.	Opt.
**†Mack A B Bus	25 Pas	6195	Own	4	4¼x5	28.9	P&S	Str	Vac	N E	None		—	Own	D R	—			196	8545	34x7	34x7 D
**†Mack A B Bus	29 Pas	6295	Own	4	4¼x5	28.9	P&S	Str	Vac	N E	None		—	Own	D R	—	—	—	225¼	8545	34x7	34x7 D
Mack A B Parlor Car	25 Pas	4750	Own	4	4¼x5	28.9	P&S	Str	Vac	N E	Own	U	4	Own	D R	—	R	D	230½	7340	Opt.	Opt.
Mack A L Bus C T	29 Pas	6500	Own	6	4¼x5	43.35	P&S	Str	E	N E	Own	C	4	Own	D R	—	4	D	233	9000	34x7	34x7 D
Mack A L	29 Pas	6500	Own	6	4¼x5	43.35	P&S	Str	E	N E	Own	C	4	Own	D R	—	4	D	233	9000	34x7	34x7 D
**†Mack A L	29 Pas	8436	Own	6	4¼x5	43.35	P&S	Str	E	N E	None		—	Own	D R	—	—	—	233	11520	34x7	34x7 D
Moreland R R-6	1½–2	1850	Con 16-C	6	3⅜x4⅜	27.3	Pb	Zen	P	Aut	Br-L 35	U	4	Tim 5622 H	St	32.95	4	D	158½	3800	32x6	32x6
Moreland B-6	2–2½	2200	Con 16-C	6	3⅜x4⅜	27.3	Pb	Zen	P	Aut	Br-L 35	U	4	Tim 63721 H	Wo	34.8	4	D	158½	4200	36x4 S	36x6 S
Moreland E-6	2½–3	3700	Her W X C	6	4 x4½	38.4	Pb	Zen	P	Aut	Br-L 51	U	4	Tim 65000 H	Wo	34.8	4	D	178	6000	34x7	34x7 D
Moreland Ex. 6	3½–4	3750	Her W X C	6	4 x4½	38.4	Pb	Zen	P	Aut	Br-L 51	U	5	Tim 65704 S	Wo	46.0	4	D	178	6500	36x5 S	36x10 S
Moreland E D-6	5	4700	Her W X C	6	4 x4½	38.4	Pb	Zen	P	Aut	Br-L 51	U	5	Tim 65000	Wo	46.0	4	D	196	8500	36x8 S	36x8 S
Moreland H-6	5	4990	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	P	Aut	Br-L 55	C	7	Tim 66702 W	Wo	82.3	4	D	192	8000	36x6 S	36x12 S
Moreland H D S-6	6	5725	Her Y X C	6	4⅜x4¾	45.9	Pb	Zen	P	Aut	Br-L 60	C	7	Own	Wo	80.6	4	D	192	9500	36x6 S	36x8
Moreland S D-5	10	6950	Con 16-T	6	4¼x5¼	43.3	Pb	Strom	P	Aut	Br-L 60	C	7	Own	Wo	88.6	4	D	192	10800	36x7 S	36x10 S
Moreland T T-6	10	8600	Con 15-H	6	4½x5¾	48.6	Pb	Strom	P	Aut	Br-L 70	C	7	Own	Wo	97.13	4	D	221	11500	36x7 S	36x10
*Fleet Arrow F A-1	1½–2	2450	Own F A	6	3½x5	29.5	Pb	Str	A P	Rem	Own	U	3	Own	Sp	33.3	4	Tr	140	3950	32x6.00	34x7
*Pierce-Arrow F A-1	1½–2	2600	Own	6	3½x5	29.4	Pw	Str	P F	Del	Own	U	3	Tim	St	63.7	4	Tr	140	4155	32x6	32x6 D
*Pierce-Arrow X A-1	2	3500	Own	4	4 x5½	25.6	Pw	Str	Pre	Del	Own	C	4	Own	Wo	44.2	D	R	150	6500	36x4	36x5 D S
*Pierce-Arrow X B-1	3	3750	Own	4	4 x5½	25.6	Pw	Str	Pre	Del	Own	C	4	Own	Wo	48.1	D	R	150	6700	36x5	36x5 D S
*Pierce-Arrow H B-1	5	4500	Own	4	4 x5½	25.6	Pw	Str	Pre	Del	Own	C	7	Own	Wo	95.0	D	R	156	8100	36x5	36x6 D S
*†Pierce-Arrow W C-1	4	5100	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	41.5	D	R	162	8490	36x5	36x6 D S
*†Pierce-Arrow R D-1	5	5400	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	40.5	D	R	162	8750	36x6	36x7 D S
*†Pierce-Arrow R F-1	7½	5600	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	51.9	D	R	168	9450	36x6	40x8 D S
†Pierce-Arrow R F-T	7½	5600	Own	4	4½x6¾	32.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	51.9	D	R	132	9900	36x6	36x8 D S
Pierce-Arrow Y	3	5850	Own	6	4 x5½	38.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	32.1	D	R	196	6300	36x6	36x6 D
Pierce-Arrow Z	3	6000	Own	6	4 x5½	38.4	Pw	Str	Pre	Del	Own	C	4	Own	Wo	32.1	D	R	220	6700	36x6	36x6 D
*Republic 75-4	1¼	1395	Lyc C T	4	3¾x5	22.5	Pb	Zen	Vac	Aut	Ful	U	3	Eat	St	21.3	R	R	124	3000	30x5	30x5
*Republic 76-4	1½	1575	Lyc C T	4	3¾x5	22.5	Pb	Zen	Vac	Aut	Ful	U	3	Eat	St	21.3	R	R	146	3350	30x5	30x5
Republic 85	2	2095	Lyc C 4	4	4 x5	25.6	Pb	Zen	Vac	Aut	Ful	U	3	Eat	St	25.5	R	D	155	4250	30x5	30x5 D
Republic 88	2	1945	Lyc C 4	4	4 x5	25.6	Pb	Zen	Vac	Aut	Ful	U	3	Eat	St	26.5	R	R	110	3350	30x5	30x5 D
Republic 50-5	2	2095	Lyc 4 S L	6	3¼x4½	25.3	Pb	Zen	Vac	Aut	Ful	U	3	Eat	St	25.5	R	D	143	4100	30x5	30x5 D
Republic 58	2½	2495	Lyc C 4	4	4 x5	25.6	Pb	Zen	Vac	Aut	Ful	U	3	Eat	St	27.5	R	D	122	4300	32x6	32x6 D
††Republic 60-61	2½	2985	Lyc T F	6	3⅜x5	31.5	Pb	Zen	Vac	Aut	Ful	U	3	Eat	St	22.0	4	D	151	7000	32x6	32x6 D
Republic 65	3	3695	Lyc T S	6	3⅞x5	36.2	Pb	Zen	Vac	Aut	Ful	U	4	Eat	D R	—	—	—	179	....	—	—
Republic15W-15W	2	2545	Wak V	4	4 x5	26.2	Pw	Zen	Vac	A B	Ful	U	3	Eat	Int	28.8	R	D	153	4200	34x4 S	34x7 S
Republic 25W-25WRB	3	3390	Wak C U	4	4⅜x5¾	30.6	Pb	Zen	Vac	A B	Ful	U	4	Eat	Int	40.3	R	D	124	5800	36x5 S	36x10 S
Republic 30W-30WB	4½	4185	Wak C U	4	4⅜x5¾	30.6	Pb	Zen	Vac	A B	Ful	U	4	Eat	Int	49.2	R	D	156	6700	36x5 S	36x12 S
Reo Speedwagon Jr.	½	895	Con	6	3⅜x5	27.3	Pb	Sch	Vac	N E	W-G	U	3	Sal	Sp	14.63	4	Tr	115	....	28x5.25 B	28x5.25 B
*Reo Speedwag'n Ton'r	1	995	Con	6	3⅜x4	27.3	Pb	Sch	Vac	N E	W-G	U	3	Own	Sp	18.478	4	Tr	123	....	30x5	30x5
Reo General Utility	1½	1345	Own	6	3 3/16x5	24.3	P&S	Sch	Vac	N E	Own	U	3	Own	Sp	22.96	4	Tr	143	....	32x6	32x6
Reo St'd Speedwagon	1½	1245	Own	6	3 3/16x5	24.3	P&S	Sch	Vac	N E	Own	U	3	Own	Sp	22.96	4	Tr	133	....	32x6	32x6
Reo Mast. Speedwagon	2	1545	Own	6	3 3/16x5	24.3	P&S	Sch	Vac	N E	W-G	U	4	Own	Sp	37.62	4	Tr	148	....	30x5	30x5 D
Reo H. D. Speedwagon	3	1985	Own	6	3 3/16x5	24.3	P&S	Sch	Vac	N E	W-G	U	4	Own	Sp	41.05	4	Tr	159	....	32x6	32x6 D
Rugby Lt. Dely Panel	½	*775	Con	4	3⅜x4¼	18.2	Pb	Til	Vac	Aut	Own	A	3	Own	Sp	14.79	4	4	107	2325f	28x4.75	28x4.75
Rugby Fast Mail Panel	¾	*975	Con	6	2⅞x4¾	19.8	Pb	Til	Vac	Aut	Own	U	3	Own	Sp	14.79	4	4	110	2600f	29x5	29x5
Rugby Express	1¼	975	Con	6	2¾x4¾	18.2	Pb	Til	Vac	Aut	Own	A	4	Own	Sp	22.4	4	4	128	2530	30x5	30x5
Rugby Mod X	1¼	680	Con	4	3⅜x4¼	18.2	Pb	Til	Vac	Aut	Own	A	3	Own	Sp	24.16	4	4	124	2175	29x5	30x5
Ruggles 18	1¼	1388	Lyc C T	4	3¾x5	22.5	Pb	Zen	Vac	Rem	Br-L 20B	U	3	Col 3400	St	15.7	R	R	134	3000	30x5	30x5
Ruggles 18	1¼	1495	Lyc S G	6	3¼x4½	25.3	Pb	Zen	Vac	Rem	Br-L 20B	U	3	Col 3400	St	15.7	R	R	134	3000	30x5	30x5
Ruggles 22	1½	2045	Her Ox	4	4 x5	25.6	Pb	Zen	Gra	Rem	Br-L 31	U	3	Col 5300	St	24.5	R	R	152	3600	32x6	32x6
Ruggles 30	1½	2047	Lyc 4 S G	6	3¼x4½	25.3	Pb	Str	Vac	Rem	Br-L 31	U	3	Eat 1504	St	29.7	R	R	160	4250	32x6	32x6 D
Ruggles 22 H	2	2345	Her Ox	4	4 x5	25.6	Pb	Zen	Gra	Rem	Br-L 35	U	4	Wis 4600	D R	29.4	R	R	152	3900	32x6	34x7

* See special notations. † See special notations.

(KEY TO ABBREVIATIONS AND TABLE CONTINUED ON NEXT PAGE)

NEW NASH DEALER AT HIGHLAND PARK NAMED

Detroit, Jan. 17.—Walter P. Hammond, Inc., is the new Nash dealer in Highland Park, it is announced by the Miller-Judd Company, Nash distributor in this territory. Mr. Hammond is president and E. G. Trout treasurer. Both are well known here. The new company has opened attractive sales and service headquarters.

HOWARD AUTOMOBILE CO. SELLS 78 CARS IN 1 DAY

Los Angeles, Jan. 17.—The Howard Automobile Company, Buick distributors, recently sold 78 new Buicks in one day. This figure has been exceeded few times in the retail department of the company. Of the total, 64 sedans, coupes and roadsters were sold to the Hentz Driv-Urself Stations, Inc., of the Pacific Coast.

CLASSIFIED ADVERTISEMENTS IN THE AUTOMOTIVE DAILY NEWS BRING RESULTS

Major Specifications and Mechanical Details of 1928 Commercial Car Built in the United States

(CONTINUED FROM PRECEDING PAGE)

Make and Model	Capacity—tons	Chassis price	Engine	No. of Cyl.	Bore and Stroke	Tax H. P.	Oil System	Carburetor	Fuel Feed	Ignit. System	Gearset	Location	No. Spds. for.	Rear Axle	Final Drive	Reduction in Low	Brakes, foot	Brakes, hand	Standard Wheel Base	Chassis Weight	Standard Tire Sizes Front	Rear
Ruggles 25	2	2662	Lyc T F	6	3⅝x5	31.5	Pb	Zen	Vac	Rem	Br-L 35	U	4	Wis 4600	D R	29.4	R	R	158	4000	32x6	34x7
Ruggles 42	3½	2565	Her Ox	4	4 x5	25.6	Pb	Zen	Gra	A B	Br-L 35	U	4	Wis 6600 B	D R	37.4	R	R	152	4300	34x4 S	34x8 S
Ruggles 45	3	3195	Her Ox	4	4 x5	25.6	Pb	Zen	Gra	A B	Br-L 35	U	4	Wis 8800 B	D R	42.0	R	R	148	5200	36x5 S	36x10 S
Selden 17	1½	1600	Con I8 E	6	3⅜x4	27.0	Pb	Zen	Vac	Aut	W-G	U	3	Cla	St	Opt.	4	D	142	3750	30x5	30x5
Selden 37 C	2½	2100	Con 15 C	6	3⅜x4⅝	27.0	Pw	Str	Vac	Aut	Br-L	U	4	Cla 506	St	Opt.	4	D	151	4600	30x5	30x5 D
Selden 47	3–4	3600	Con 6 B	6	3¾x5	33.75	Pw	Str	Vac	Aut	Br-L	U	4	Cla 720	St	Opt.	R	R	165	5550	32x6	32x6 D
Selden 77	5–7	5800	Con 20 R	6	4⅛x5¼	40.84	Pw	Str	Vac	Aut	Br-L	A	7	Wis	D R	Opt.	R	R	211	8850	36x8	36x6 S D
Selden 47 X	4	3795	Con 6 B	6	3¾x5	33.75	Pw	Str	Vac	Aut	Br-L	U	4	Wis	D R	Opt.	R	R	130	5760	34x7	34x7 D
Selden 22	21 Pas	2750	Con 15 C	6	3⅜x4⅝	27.0	Pw	Str	Vac	N E	Br-L	U	4	Cla 506	St	Opt.	R	R	184	4400	32x6	32x6
Selden 42	25 Pas	3900	Con 6 B	6	3¾x5	33.75	Pw	Str	Vac	N E	Br-L	U	4	Cla 720	St	Opt.	R	R	210	5890	32x6	32x6 D
Selden B 47 X	4	3795	Con 6 B	6	3¾x5	33.7	Pw	Str	Vac	Aut	Br-L	U	4	Cla 720	St	Opt.	R	R	143	6260	34x7	34x7 D
Selden B 22 C	18	2125	Con 15 C	6	3⅜x4⅝	—	Pw	Str	Vac	Aut	Br-L	U	4	Cla 506	St	Opt.	4	D	184	4800	30x5	30x3 D
Selden B 42	25	3900	Con 6 B	6	3¾x5	—	Pw	Str	Vac	Aut	Br-L	U	4	Cla 720	St	Opt.	R	R	210	1800	32x6	32x6 D
Standard 2½ K	2½-3½	3200	Con K-4	4	4⅛x5⅛	27.2	Pb	Str	Vac	Aut	Br-L 35	A	4	Tim 65600	Sp Wo	34.8	R	D	147	5400	36x5 S	36x8 S
Standard 3½ K	3½–5	4350	Con L-4	4	4½x5½	32.4	Pb	Str	Vac	Aut	Br-L 55	A	7	Tim 66700	Sp Wo	83.0	R	D	160	7485	36x5 S	36x12 S
Standard 5 K	5–7	5250	Con B-5	4	4¾x6	36.1	Pb	Str	Vac	Aut	Br-L 60	A	7	Tim 68700	Sp Wo	83.6	R	D	164	8700	36x6 S	40x14 S
*Stewart Buddy 21	¾	895	Lyc W S G	6	2⅞x4¾	19.8	Pb	Str	Gra	Rem	W-G	U	3	Sal	Sp	30.0	R	D	118	2450	30x5.50	30x5.50
*Stewart Buddy 21 X	1	985	Lyc W S G	6	2⅞x4¾	19.8	Pb	Str	Vac	Rem	W-G	U	3	Sal	Sp	30.0	4	D	128	2773	30x5	30x5
*Stewart 16	1¼	1295	Lyc C T	4	3¾x5	22.5	Pb	Str	Vac	Rem	Ful	U	3	Cla	Sp	24.0	4	D	130	3050	32x6	32x6
*Stewart 16 X	1¼	1295	Lyc 4 S L	6	3¼x4½	25.3	Pw	Str	Vac	Rem	Ful	U	3	Cla	Sp	24.0	4	D	130	3148	32x6	32x6
*Stewart 24	1½	1645	Lyc C 4 W	4	4 x5	25.6	Pb	Str	Vac	Rem	Ful	U	4	Cla	Sp	27.3	4	D	145	3740	30x5	30x5 D
*Stewart 24 X	1½	1645	Lyc C 4 W	6	3¼x4½	25.3	Pw	Str	Vac	Rem	Ful	U	4	Cla	Sp	27.3	4	D	145	3838	30x5	30x5 D
*Stewart 25	2	1975	Lyc C 4 W	4	4 x5	25.6	Pb	Str	Vac	Rem	Ful	U	4	Tim	Sp	27.3	4	D	145	3960	32x6	34x7
*Stewart 25 X	2	1975	Lyc 4 S L	6	3¼x4½	25.3	Pw	Str	Vac	Rem	Ful	U	4	Tim	Sp	27.3	4	D	145	4058	32x6	34x7
*Stewart 25 W	2	2095	Lyc C 4 W	4	4 x5	25.6	Pb	Strom	Vac	Remy	Ful	U	4	Tim	Sp	29.0	4	D	146	4100	32x6	34x7
*Stewart 25 X W	2	2095	Lyc 4 S L	4	3¼x4½	26.3	Pw	Str	Vac	Rem	Ful	U	12	Tim	Wo	29.0	4	D	145	4158	32x6	34x7
Stewart 26 X W	2	2190	Lyc T	6	3⅝x5	31.5	Pw	Str	Vac	Rem	Ful	U	4	Tim	Sp	29.0	4	D	165	5000	32x6	32x6 D
Stewart 26 X W	2	2290	Lyc T	6	3⅝x5	31.5	Pw	Str	Vac	Rem	Ful	U	4	Tim	Sp	29.0	4	D	165	5000	32x6	32x6 D
*Stewart 18 X	2½	2690	Lyc T	6	3⅝x5	31.5	Pw	Str	Vac	Rem	Ful	U	4	Tim	Wo	29.0	4	D	165	5000	32x6	32x6 D
*Stewart 19 X	3	3490	Lyc F	6	3⅞x5	36.2	Pw	Str	Vac	Rem	Ful	U	4	Tim	Wo	34.8	4	D	165	640[illegible]	36x5	36x10
*Stewart 22 X	4	4200	Lyc F	6	3⅞x5	36.2	Pw	Str	Vac	Rem	Ful	U	4	Tim	Wo	29.0	4	D	165	7500	32x6	32x6 D
Studebaker G E-B	¾	925	Own	6	3⅜x4½	27.3	P C	Ball	P	Rem	Own	U	3	Own	S B	14.9	4	Js	113	2590	32x6 B	32x6 B
Studebaker G D-N	1	1075	Own	6	3⅜x4½	27.3	P C	Str	P	Rem	Own	U	3	Own	Sp	13.7	4	Js	140	2860	30x5	30x5
Studebaker "75" Jr.	2½	2410	Own	6	3⅞x5	36.0	P C	Ball	P	Rem	Ful	U	3	Eat	Sp	19.8	4	Js	153	4504	32x6.75 B	32x6.75 B
Studebaker "76" Spec.	3	2775	Own	6	3⅞x5	36.0	P C	Str	P	Rem	Ful	U	3	Eat	Sp	19.8	4	Js	184	4765	32x6.75 B	32x6.75 B
Studebaker "75" H. D.	3½	3275	Own	6	3⅞x5	36.0	P C	Ball	P	Rem	Ful	U	4	Eat	Sp	24.6	4	Js	184	5290	34x7.50 B	34x7.50 B
Stud. Ersk. Mod. 52-B	½	675	Con 9 F	6	2¾x4½	18.0	P C	Sch	Vac	Rem	W-G	U	3	Tim	Sp	15.6	4	Js	109	....	30x5.00	30x5.00
Velie 33	¾	1165	Own 56	6	3⅛x4½	24.5	Pw	Strom	Vac	Aut	War-G	U	3	Own ½	Sp	4.9	4	Tr	112	2352	30x5.25	30x5.25
Velie 40	1½	1595	Own 40	6	3⅛x4⅝	24.4	Pw	Strom	Vac	Remy	War	U	3	Col ½	Sp	6.5	4	Tr	148	4198	32x6.75 B	32x6.75 B
Victor 25	1½	1490	Cont	6	2⅞x4¾	19.8	Pb	Zen	Vac	Rem	Cov	U	3	Tim	Sp	18.1	4	D	131	3000	30x5	30x5
*Victor 41	2	2300	Cont	6	3⅜x4⅝	27.3	Pb	Zen	Vac	Rem	Cov	U	4	Tim	Sp	40.1	4	D	154	3400	32x6	34x7
*Victor 71	3–3½	4085	Her	4	4¼x5¾	28.9	Pb	Zen	Gra	Rem	Cov	U	4	Tim	Wo	—	R	R	162	5800	36x6	36x6 D
Victor 80	4–4½	4755	Her	6	4 x5¾	38.2	Pb	Zen	Vac	—	Cov	U & C	9	Wis	D R	—	R	R	160	7000	36x5 S	36x12 S
Victor 80	4–4½	4605	Her	4	4½x5¾	32.4	Pb	Zen	Vac	—	Cov	U & C	9	Wis	D R	—	R	R	160	7000	36x5 S	36x12 S
Whippet 96	½	365	Own 96 A	4	3⅛x4¾	15.6	Pb	Til	Vac	Aut	Own	U	3	Own	Sp	15.84	4	R	103⅛	1469	28x4.75	28x4.75
White 15 B	1	1545	Own G K A	4	3¾x5⅛	22.5	G S	Zen	Vac	L-N	Own	C	4	Own	Sp	18.6	R	R	133½	3242	30x5	30x5
White 57	1¼	2725	Own G R C	4	4 x5¾	25.6	Pw	Zen	Vac	L-N	Own	U	4	Own	Sp	19.3	R	R	146	3774	32x6	32x6
White 20-B	1½	2125	Own G K A	4	3¾x5⅛	22.5	G S	Zen	Vac	L-N	Own	C	4	Own	D R	32.1	R	R	145½	4412	34x5	34x5 D P
White 56	2	3125	Own G R C	4	4 x5¾	25.6	Pw	Zen	Vac	Mag	Own	U	4	Own	Sp	26.1	R	D	165	5157	36x4 S	36x7 S
White 51-A	2½	3750	Own G R B	4	4¼x5¾	28.9	Pb	Zen	Vac	Mag	Own	U	4	Own	Sp	35.5	R	D	170	6256	36x5 S	36x8 S
White 55	3½	4650	Own G R B	4	4¼x5¾	28.9	Pb	Zen	Vac	Mag	Own	U	4	Own	I G	50.4	D	R	174	8402	36x5 S	40x5 S D
White 52-T	3½	4700	Own G R B	4	4¼x5¾	28.9	Pb	Zen	Vac	Mag	Own	U	4	Own	I G	58.4	D	R	129½	8126	36x5 S	40x5 S D
White 52	5	5100	Own G R B	4	4¼x5¾	28.9	Pb	Zen	Vac	Mag	Own	U	5	Own	I G	91 9	D	R	174	9184	36x6 S	40x12 S
White 58	3	4400	Own G R B	4	4¼x5¾	28.9	Pw	Zen	Vac	Mag	Own	U	4	Own	I G	49.5	D	A	180	7400	36x5 S	36x5 S D
*†White 50B 25-29 Pas.	—	5350	Own G R B	4	4¼x5¾	28.9	Pb	Zen	Vac	Mag	Own	U	4	Own	D R	19.3	4	D	198	6494	34x7	34x7 D
*†White 53 18-21 Pass.	—	4250	Own G R B	4	4¼x5¾	28.9	Pb	Zen	Vac	Mag	Own	U	4	Own	Sp	18.1	4	D	180	6000	34x7.50B	34x7.50DB
*†White 54 25-29 Pass.	—	7500	Own 1 A 1	6	4⅜x5¾	45.9	Pw	Zen	Aut-P	L-N	Own	U	4	Own	Sp	23 0	4	D	227	7915	38x9.00B	38x9.00DB
Willys Knight T-100	1	1095	Own K G T	6	2⅛x3⅞	20.7	Pb	Til	Vac	Aut	Own	U	3	Tim 5260	Sp	26.03	4	R	130	2700	30x5	30x5
Willys-Knight 15	1½	1545	Own K G T	6	2⅛x3⅞	20.7	Pb	Til	Vac	Aut	Ful D U	U	3	Eat 1002	Sp	24.3	4	R	134	3300	30x5	32x6
Willys-Knight 16	1½	1595	Own K G T	6	2⅛x3⅞	20.7	Pb	Til	Vac	Aut	Ful D U	U	3	Eat 1002	Sp	24.3	4	R	151	3400	30x5	32x6
Willys-Knight 20	2	1945	Own K G T	6	3⅜x4¾	27.34	Pw	Til	Vac	Aut	Ful D U	U	3	Eat 1504	Sp	26.81	4	R	150	3800	32x6	34x7
Willys-Knight 21	2	1995	Own K G T	6	3⅜x4¾	27.34	Pw	Til	Vac	Aut	Ful D U	U	3	Eat 1504	Sp	26.81	4	R	164	3900	32x6	34x7
Willys-Knight 25	2½	2545	Own K G T	6	3⅜x4¾	27.34	Pw	Til	Vac	Aut	Ful G U	U	4	Wis 6617 B	D R	30.38	4	R	150	4920	32x6	32x6 D
Willys-Knight 26	2½	2595	Own K G T	6	3⅜x4¾	27.34	Pw	Til	Vac	Aut	Ful G U	U	4	Wis 6617 B	D R	30.38	4	R	164	5020	32x6	32x6 D

GENERAL NOTATIONS

*†**REFERENCE MARKS** apply to individual lines only and explanations are given under the subdivision for each company in the **"SPECIAL NOTATIONS."**

CAPACITIES given in this table are in tons or fractions of tons. Bus capacities are given in number of passengers.

TIRE EQUIPMENT where not otherwise indicated is solid.

WHEEL BASES given are standard, but optional wheel bases are available in many cases.

ENGINE—Bud, Buda; Con, Continental; Her, Hercules; Kgt, Knight; Lyc, Lycoming; Wak, Waukesha; Wis, Wisconsin.

LUBRICATION—Pb, pressure lubrication to main and connecting rod bearings; Pw, full pressure lubrication to all bearings, including wrist-pins; P&S, pressure with splash; CS, circulating splash.

CARBURETOR—Car, Carter; Hol, Holley; Joh, Johnson; Mar, Marvel; Sch, Wheeler-Schebler; Str, Stromberg; Stw, Detroit lubricator; Til, Tillotson; Zen, Zenith-Detroit.

FUEL FEED—Gra, Gravity; Pre, Pressure; Vac, Vacuum tank; P, Fuel pump Auto-P, Auto pulse; E, Electric pump.

IGNITION—AB, American-Bosch; Aut, Electric Auto-Lite; Apo, Apollo; Del, Dayton Engine Laboratory; Eis, Eisemann; L-N, Leece-Neville; N-E, North East; RB, Robert Bosch; Rem, Delco-Remy; Spf, Splitdorf.

TRANSMISSION—Br L, Brown-Lipe; Cov, Covert; Ful, Fuller; Mec, Mechanics Machine; Mun, Muncie; W-G Warner Gear.

LOCATION—C, Center, Amid; U, in unit with engine.

REAR AXLE—Cla, Clark Equipment; Col, Columbia; Eat, Eaton; Sal, Salisbury; Tim, Timken; Wis, Wisconsin.

FINAL DRIVE—St, Straight bevel; Sp, Spiral Bevel; Wo, Worm; DR, Double Reduction; Ch, Chain; IG, Internal Gear.

BRAKES—Js, Jackshaft; R, Rear wheels; D, Drive Shaft; 4, Four-wheel; Tr, Transmission.

TIRES—B, Balloon; D, Dual; S, Solid.

SPECIAL NOTES

AMERICAN-LA FRANCE

**On Model W—This model is also available with worm drive axle.

AUTOCAR

†Engines in these models are located under the driver's seat.

DURANT LINE

*Price includes panel body.

G. M. C. LINE

†Pneumatic tire equipment also available.

*Model T30A is also available as Model T30B, priced $1,435, with 152-inch wheel base, and as Model T30C, priced $1,485 on 164-inch wheel base.

*Model T42A is also available as Model T42B, priced $1,720 on 152-inch wheel base, and as Model T42C, priced $1,735 on 164-inch wheel base, and also as Model T42D, priced $1,760 on 175-inch wheel base.

*Model T60A is also available as Model T60B, priced $2,635 on wheel base of 160 inches; also as Model T60C, priced $2,650 on 180-inch wheel base, and as Model T60D, priced $2,685 on 200-inch wheel base. Prices on these models are for solid tire equipment. Pneumatic tire equipment is also available in each case at $215 extra.

*Model T80A is also available as Model T80B, priced $2,815 on 160-inch wheel base; also as Model T80C, priced $2,830 on 180-inch wheel base, and as Model T80D, priced $2,865 on 200-inch wheel base. Prices on these models are for solid tire equipment, pneumatic tire equipment is available in each case at $295 extra.

*Model K102A is also available as K102B, at $5,320 on 184-inch wheel base.

FLEET-ARROW LINE

*Model F. A. 1 is also available as Model F. A. 2, at $2,500 on wheel base of 160 inches, weight 3,975 lbs., and as Model F. A. 3, at $2,550, with seven speed transmission, on 180-inch wheel base, weight 3,935 lbs.

HAHN LINE

*Model 24 also available as Model 26, priced $1,495, on 144-inch wheel base, with Buda H. S. engine, 6-cyl. 3⅜x4½ inches rated 27.3 h. p., weight 3,200 lbs.

*Model 34 also available as Model 36, with Buda H. S. 6 engine (described above), weight 3,850 lbs.

*Model 44 also available as Model 46, priced $2,410, on 156-inch wheel base, with Buda H. S. 6 engine, as in Model 26, weight 4,200 lbs.

†Model 56 also available on 171-inch wheel base.

INTERNATIONAL HARVESTER LINE

*Model HS-54 also available in the following wheel bases, 130-inch tractor, 170, 185 and 200-inch.

*Model HS-54-C also available in the following wheel bases, 130-inch tractor, 170, 185 and 200-inch.

†Frame is reinforced with inserted channels in each side rail, extending from dash to rear end.

*Model HS-74 also available in the following wheel bases, 144-inch tractor, 185, 210 and 235-inch.

*Models HS-74-C and HS-104-C also available in the following wheel bases, 146-inch tractor, 185, 210 and 235-inch.

All Model HS heavy-duty International truck models are equipped with built-in vibration dampered clutches.

LARRABEE

*Note—Bevel gear, worm or double reduction drive rear axle available in models 40 and 50. Bevel or double reduction axles available in 30. Worm or double reduction axles in 60 and 70. Three or more wheel bases in each model. All Larrabee models have hydraulic brakes; 40 up have vacuum booster.

MACK LINE

*Model AB, 1½ to 2 ton model, also available with double reduction rear axle; priced $3,450.

*Model AB, 2½ to 3 ton model, also available with double reduction rear axle; priced $3,850.

CT—City type bus.

P—Parlor type bus.

‡Gas electric drive.

**Equipped with electric brakes on rear wheels and hand brake on drive shaft.

PIERCE-ARROW LINE

*Model A1 also available as Model A2, at $2,650 on 160-inch wheel base, weight 4,295 lbs., and also as Model A3, at $2,700 on 180-inch wheel base, weight 4,255 lbs.

*Model XA1 also available as Model XA2, at $3,550 on 162-inch wheel base, weight 6,550 lbs., and also as Model XA3, at $3,600 on 180-inch wheel base, weight 6,600 lbs.

*Model XB1 is also available as Model XB2, at $3,750 on 162-inch wheel base, weight 6,800 lbs., and as Model XB3, at $3,800 on 180-inch wheel base, weight 6,850 lbs.

*Model HB1 is also available as Model HB2, at $4,550 on 180-inch wheel base, weight 8,200 lbs., and also as Model HB3, at $4,600 on 198-inch wheel base, weight 8,300 lbs.

*Model WC1 is also available as Model WC2, at $5,150 on 180-inch wheel base, weight 8,550 lbs., and also as Model WC3, at $5,250 on 198-inch wheel base, weight 8,590 lbs.

*Model RD1 is also available as Model RD2, at $5,400 on 180-inch wheel base, weight 5,450 lbs., and also as Model RD4, at $5,550 on 204-inch wheel base, weight 9,300 lbs., and also as Model RD4, at $5,500 on 204-inch wheel base, weight 9,400 lbs.

*Model RF1 is also available as Model RF2, at $5,650 on 204-inch wheel base, weight 10,020 lbs.

†Seven-speed transmission also available.

REPUBLIC LINE

*Model 75-4, also available as Model 75-6, priced $1,495, on 128-inch wheel base, with Lycoming 4SL engine, 6-cyl. 3¼ by 4½ inches, rated 25.3 h. p., weight 3,150 lbs.

*Model 76-4, also available as Model 76-6, priced $1,675, on 150-inch wheel base, with Lycoming 4SL engine, as in Model 75-6, weight 3,500 lbs.

†Model 60-61, also available with four-wheel brakes, $3,155.

**Model 62, same as 60-61, on 171-inch wheel base, $3,040.

**Model 66, same as 65, on 200-inch wheel base, $3,750.

**Model 25W, 25WB and 25WBR also available in 3½-ton capacities as Models S25W, S25WB and S25WRB on wheel bases of 165, 156 and 124 inches, priced $3,695.

**Models 35 and 35B also available in 5-ton capacities on wheel bases of 170 and 157 inches, priced $5,145.

**Model 85 also available on Model 86 on 170-inch wheel base, price $2,150.

**Model 50-51 also available as Model 52 on 170-inch wheel base.

REO LINE

*Tonner in wheel base, 123, 138; 1½ in wheel base, 133, 143, 148; 2 in wheel base, 148, 164; 3 in wheel base, 159, 175, 130.

STEWART LINE

*Buddy ¾-ton can be equipped with 4 wheel brakes.

*Buddy 1-ton can be supplied in 138-inch wheel base.

*Models 16 and 16X can be supplied in 145-inch wheel base.

*Models 24 and 24X can be supplied in 132 and 160-inch wheel base.

*Models 25, 25W, 25X and 25XW can be supplied with dual 32x6 tires, also 160-inch wheel base.

*Model 18X can be supplied in 148 and 190-inch wheel base.

*Models 19X and 22X can be supplied in 148, 172, 190 and 220-inch wheel base.

WHITE LINE

*Bus Models are equipped with Booster Brakes.

†Supplied in optional wheel bases, with solid tires if desired.

FORD LINE

*Rear axle ratios of 5.1 to 1 and 7.25 to 1 are also available.

VICTOR LINE

*Also available with Hercules 4-cyl. 4x5-inch engine, rated at 25.6 h. p.

†Also available with Continental engine 3¾x4½ inches, rated at 33.7 h. p., or Continental 6-cyl. engine 3¾x5, rated at 33.7 h. p.

M. E. A. PLANS FOR EXTENSIVE WORK

Sales Development and Credit Interchange Are Outlined

(Continued from Page 1)

sales development activity is progressing with Neal G. Adair as manager, and the credit department, which serves manufacturer members and whose facilities have been enlarged to care for the needs of former A. E. A. members brought in through the recent consolidation, will be conducted by A. H. Fagan, for years in charge of the credit activities of the M. & A. M. A.

The sales development department has undertaken two divisions of activity in the interest of the membership and the trade, sales research and sales promotion. Early undertakings in the former classification are expected to include analyses of the aircraft, fleet owner and marine markets, followed by studies of marketing methods of manufacturers and wholesalers. Sales promotion activities will include the annual business exhibit in Chicago in the fall, conducted for the past ten years by the former A. E. A., participation in the national automobile shows at New York and Chicago, publication and distribution of an automotive buyer's guide and an aircraft buyer's guide, compilation and dissemination of foreign trade information and other activities still to be planned. The M. E. A. Business Bulletin will be broadened to include territorial as well as national sales and production information.

The department began the new year with exhibits in the two national shows visualizing the facilities of the wholesaler in the service of the retail automotive trade, supported by an illustrated booklet, "The Story of the Wholesaler," which has been widely distributed throughout the industry.

The department will continue promotion of the course in automotive selling, which has been approved by many manufacturing, wholesaling and retailing establishments whose salesmen have enrolled for study. George G. Brosch, former Pacific coast field representative, has been assigned as special representative for the promotion of the course.

PLAN ELABORATE SHOW AT ATLANTIC CITY PIER

Atlantic City, N. J., Jan. 17.—Atlantic City's thirteenth annual automobile show, opening next Saturday on the Million Dollar Pier, to continue night and day for a week, will be the largest and most interesting motor car exhibit ever held in the resort, according to Alex H. Latta, chairman of the general committee.

Two hundred cars, valued at approximately $500,000, including twenty-six different makes, eight types of trucks and several buses, will be on display. Motor boats and airplanes will also be exhibited. Radios, motorcycles and automobile accessories will be displayed. The event is sponsored by the Automobile Trade Association. The pier will be elaborately decorated in an Oriental Chinese style for the occasion. The committee, headed by Latta, consists of William Crandell, George Albrecht, Edward F. Wills and Edison Mathis.

Detroit, Jan. 17.—Arthur Sowdon, experienced airplane pilot and stunt flyer and formerly engineering officer at Miller Field, S. I., N. Y., has been appointed director of aviation sales for the Detroit Steel Products Company, with headquarters in Detroit.

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Get Ready for the Chicago Show

Special distribution of Automotive Daily News, in addition to the regular net paid circulation, will be similar to the distribution of the New York show issues as follows:

1. Every shop equipment, parts and accessory wholesaler in the United States.
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Show Issues Jan. 28, 29, 30, 31, Feb. 1

Advertisers are requested to make reservations early, particularly so if any special position is desired.

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C. O. Mininger of Auto Lite Plans For Record Equipment Trade Year

Toledo, Jan. 17.—In expressing his confidence in a continuance of the cycle of prosperity so apparent in the past few years, C. O. Mininger, president of the Electric Auto Lite Company of Toledo, sees prospects for the largest business era in the history of his company during the coming twelve months.

C. O. Mininger

"Our plans are laid for a record year," he said, "and I base this prediction on a solid foundation of fact. In the electric equipment business, our profits per unit are relatively small, but the hundreds of millions of units comprising our output for 1929 present the most prosperous picture in our entire history.

"It has long been our policy to expand in order to keep pace with the constant growth and expansion of the automobile industry. Had we not operated along this basic line, we would be unable to keep our rightful place with industry.

"Automobile manufacturers have planned the most aggressive sales campaigns in history for 1929, so our policy of expanding has been well founded to meet the demand of the industry. This anticipated increase in car building schedules, of course, will be reflected in the earnings of our company.

"Much has been said recently of companies maintaining large cash reserves, with many organizations having such cash items far in excess of their capital structure. Our policy in this respect has been to utilize cash for development and increase of current earnings rather than to maintain large cash reserves."

TEXAS PLANS TO BOOST GAS TAX BY TWO CENTS

Austin, Jan. 17.—An increase in the sales tax on gasoline to 4 cents from 2 cents a gallon and apportionment of the fees derived from motor vehicle registrations are proposed in a bill which has been introduced in the Texas Legislature by Represenattive Leonard Tillotson.

CONTINENTAL MOTORS CORP. POSTPONES MEETING

Richmond, Jan. 17.—The annual meeting of the Continental Motors Corporation stockholders, scheduled for Wednesday, was postponed indefinitely.

F. J. Haynes Heads Durant Motors, Inc., Under New Policy

(Continued from Page 1)

rison Phelps, Inc., maintains its headquarters in Detroit, with branches in New York and London.

Mr. Hodgkins was the first of the new group to be announced by Mr. Durant. During the New York automobile show he was named as the advance guard of the new management that was about to assume charge of Durant Motors. Mr. Hodgkins came to his new position of general sales manager from the Federal Truck Company, Detroit, where he was vice-president.

Mr. Kerby and Mr. Henniger, with Mr. Durant, were re-elected members of the board. Mr. Kerby is vice-president and general manager of Durant Motors, Canada, Ltd., and Mr. Henniger is vice-president and general manager of the Adams Axle Company of Syracuse, N. Y., of the Warner Corporation, Muncie, Ind., and of the New Process Gear Company, subsidiaries from which Durant Motors obtains many of its parts.

Speaking for the new management, Mr. Haynes made the following statement:—

"We enter upon these new duties with the utmost confidence and enthusiasm. We know one another thoroughly, we know our obligations to our dealers and to the public, and we know the work that confronts us.

"We have investigated the Durant factories and product and found them to be excellent. The Durant car, we believe, is really superior to the average and possesses certain distinctive qualities not yet generally known to the public. It is our purpose to make them known—and to constantly make the product still better, and therefore still more worthy of the good name Mr. Durant has given it."

Mr. Haynes confirmed previous reports that the general offices and chief manufacturing activities of the Durant company would be transferred from New York and Elizabeth, N. J., to Lansing, Mich.

FOREIGN GROUP TOURING DETROIT CAR PLANTS AFTER VISIT TO N. Y.

Special from A. D. N. Detroit Bureau

Detroit, Jan. 17.—Visiting Detroit after the New York show, a group of foreign automobile men have been making a tour of the factories, with Kenneth A. Moore of the National Automobile Chamber of Commerce at Cicerone.

The party includes Guido Soria, vice-president and general sales manager of Fiat, R. Schaeffer and L. Sossi, of the same company, and William Boekel, of the Austrian Automobile Club, Vienna. Signor Soria reports that Italian industrial conditions are in a healthy and growing condition and that Fiat is active. He notes few basic advances in automobile design, his observation being that the emphasis is rather on refinement of engine and body.

BROOKLYN TO OPEN 18TH CAR SHOW TOMORROW

Brooklyn, Jan. 17.—The Eighteenth Annual Automobile Show to be held in Brooklyn will open on January 19 under the sponsorship of the Brooklyn Motor Vehicle Dealers' Association of which Harry N. Pyke is president. Ralph Ebbert is manager of the show this year.

GARDNER SPECIAL MEETING PUT OFF UNTIL JANUARY 29

St. Louis, Jan. 17.—The special meeting of the stcokholders of Gardner Motor Company, Inc., has been postponed until January 29.

OAKLAND-PONTIAC SALES SHOW BIG GAIN OVER 1927

Pontiac, Jan. 17.—Final sales figures for December—5,175 cars—bring the total Oakland-Pontiac sales for 1928 to a new high record of 260,246 cars. This total is 67,280 greater than during the preceding year when 192,966 Oakland and Pontiac Sixes were sold to dealers.

The new Pontiac Big Six production is now under way and it is expected that within a short time the production of this new model will be brought up to 700 cars per day, with even greater production promised for February. Total sales for the current year are expected to exceed 310,000 cars.

BENDIX OFFERS RIGHTS TO ITS STOCKHOLDERS

Chicago, Jan. 17.—Vincent Bendix, president of the Bendix Corporation, announced here that stockholders of the company of record January 26 will have the privilege of subscribing to one additional share of stock at $90 for each ten shares owned at that date. The increase in stock is being made in connection with the purchase of a majority interest in the Eclipse Machine Company. Governors of the Chicago Stock Exchange today approved for listing an additional 50,000 shares of Bendix Corporation stock. Bendix tonight announced that the General Motors Corporation had financed the purchase of the Eclipse interest.

MARTIN PARRY'S LOSS $37,653 FOR QUARTER

New York, Jan. 17.—Martin Parry Corporation reports for the quarter ended November 30, 1928, a net loss of $37,653 after expenses, interest, etc., comparing with net loss of $43,404 in corresponding quarter of 1927.

RANGE OF AUTOMOTIVE STOCKS

NEW YORK STOCK EXCHANGE

Previous 1929 High	Previous 1929 Low	Div.		Sales	High	Low	Close	Net Change
56	48½	....	Advance Rumely	600	52½	51¼	51½	+ 1
64¾	60	....	do pf	200	61	61	61	....
11	9½	....	Ajax Rubber	1,900	10¾	10⅜	10⅜	— ⅛
194	129½	7	Allis-Chalmers	300	185	183	185	— 3
45½	41⅜	....	Am. Bosch Magneto	4,000	44¾	43	43⅝	+ 1⅝
77	76½	7	Am. Chain pf	200	72¾	72¾	72¾	— 4½
8⅜	7⅜	....	Am.-La France	900	8½	8	8⅛	+ ⅛
63¾	54½	....	Briggs Mfg. Co.	33,000	59	57	57¾	+ ½
73⅜	67¾	3	Brockway Motor	400	68	67½	68	+ ⅝
23	20¾	....	Chandler Motor	600	22	22	22	....
40	37	....	do pf	200	38½	38½	38¼	— 1½
56½	55½	3.50	Chicago Pneu. Tool	2,100	55½	55	55	— ½
135	120½	3	Chrysler Corp.	34,000	122	120½	121⅛	+ ⅜
24⅜	19¼	.80	Continental Motors	117,500	26½	22¾	26	+ 3⅛
69	61	3	Eaton Axle & Spring	1,500	66⅜	65½	66	+ ⅝
142⅜	134⅛	4	Electric Auto-Lite	22,900	146⅜	138	146⅜	+ 9⅜
88⅜	84⅜	5	Electric Stor. Battery	500	85⅜	85⅛	85⅜	+ 1
20⅜	19	.80	Federal Motors	200	19	18½	18⅝	— ½
18⅜	15⅜	....	Fisk Rubber	19,600	18⅝	17⅛	17⅝	+ ¼
72½	65	....	do 1st pf	200	70½	70½	70½	+ 3
28¼	24	....	Gabriel Snubber	1,200	26⅞	26½	26⅝	+ ⅛
17½	15	....	Gardner Motor	500	16	15⅜	15⅜	— ¼
209½	194⅝	5	General Motors	2,300	198	195½	196¼	+ 1⅜
126½	124⅜	7	do pf	200	125½	124⅜	125¼	+ ⅝
42½	36⅝	1.50	Gliddden Co.	25,700	44	41¼	43⅝	+ 1⅜
103⅝	96	4	Goodrich Co.	8,400	102¼	98⅝	101⅛	+ 1⅝
114⅜	113	7	do pf	400	114½	113½	114½	+ ½
140	122½	....	Goodyear T. & R.	9,800	135½	130¼	132¼	+ ⅝
105⅝	103	7	do 1f	200	103⅝	103	103⅝	+ ⅛
54	49	....	Graham-Paige Motor	10,900	50⅝	48½	50¼	+ 1¼
93	84	5	Hudson Motor Car	9,000	86	85	85½	+ ⅛
81⅜	76⅜	2	Hupp Motor Car	12,600	79½	77½	79	+ ¾
14¼	11	....	Interco. Rubber	300	12⅝	12⅝	12⅝	+ ⅛
101⅞	92⅜	3.50	International Harvester	1,200	94¼	93⅜	94⅜	+ 2
198⅜	189½	3	Johns-Manville	2,400	193¾	189	192	+ 3
16⅜	12½	....	Jordan Motor Car	1,500	14	13⅛	14	+ ½
23⅜	21½	....	Kelly-Springfield	5,800	23⅞	22½	22¼	+ ¾
100	98½	....	do 6s pf	100	98½	98½	98½	— 1½
94⅝	92½	....	do 8s pf	100	93	93	93	....
51⅜	47⅜	2	Kelsey-Hayes Wheel	1,100	48⅝	48	48¼	+ ¼
25	24⅛	....	Lee Rubber & Tire	2,500	23½	23⅛	23½	....
112	104½	6	Mack Trucks	4,600	106⅜	104	105	+ ⅛
84	69½	4	Marmon Motor	500	74⅜	72⅛	74⅜	+ ¼
78	74	2	Martin Rockwell	100	74⅛	74⅛	74⅛	+ ¼
18	17½	....	Martin Parry	800	18	17½	18	+ ¾
34⅜	28⅜	....	Mengel	6,200	33¼	32½	32⅝	+ ¼
28⅜	22½	....	Miller Rubber	500	26	25½	26	+ ¼
8	6⅝	....	Moon Motors	2,300	7½	7⅛	7¼	+ ⅛
25⅜	23	....	Moto Meter A	1,300	23	22½	22½	— ⅜
185	166¾	2	Motor Products	200	172½	165	172½	+ 4½
81⅜	76⅛	....	Mullins Mfg. Co.	400	76⅛	75	75	— 1⅜
76⅜	68	....	Murray Corp.	2,800	72½	68	72½	+ 4
110	102¼	4	Nash Motors	8,800	104½	103¼	104¼	+ 1⅛
6¼	5	....	Norwalk T. & R.	300	5¾	5¾	5¾	+ ⅛
9¼	8½	....	Omnibus Corp.	200	9¼	9¼	9⅜	+ ⅛
153	138⅜	3	Packard Motor Car	5,100	142⅜	140½	141	+ ⅜
32½	19⅜	....	Peerless Motor Car	1,100	20½	20⅛	20⅛	— ⅜
37⅜	28⅜	....	Pierce-Arrow A	11,100	34	32¼	34	+ 1¼
86½	72½	....	do pf	100	82½	82½	82½	....
31⅜	28¾	.80	Reo Motors	1,000	28⅜	28¼	28½	— ⅛
11½	10⅜	....	Reynolds Spring	22,600	12¼	10⅞	11⅞	+ 1⅝
51½	45	....	Spicer Mfg. Co.	2,500	49⅞	48½	49⅞	+ ½
142	132½	6	Stewart-Warner Speed	4,400	139	133¼	139	+ 3⅝
93⅜	52⅜	....	Stromberg Carburetor	400	54	53¼	53¼	— ⅞
90⅜	77	5	Studebaker Co.	25,100	88⅜	87⅞	87⅞	+ ⅝
157½	76⅜	....	Timken Roller Bear	4,200	80⅜	79⅛	79¼	+ ½
43¼	41¼	2.50	Trico	700	41⅞	41⅜	41½	— ⅛
55¼	42	....	U. S. Rubber	37,400	54½	52⅛	53½	+ ⅝
91⅜	81	....	do 1st pf	4,000	92¼	90¾	92	+ ½
152½	137½	4	Westinghouse A. B.	9,600	141⅜	138½	140⅝	+ 2½
48½	40⅜	1	White Motors	5,300	47⅞	46⅞	47½	....
35	31½	1.20	Willys-Overland	8,100	32⅝	31¾	32⅛	....
103	101	7	do pf	100	101	101	101	— 1
42¾	38	....	Yellow Truck & Coach	9,800	41	38½	39⅝	+ ½

NEW YORK CURB MARKET

Sales		High	Low	Close	Net Ch'ge.
500	Auburn Auto	138	136	138	+ 2
100	Bendix Corp.	125	125	125	+ 8
100	Bohn Alum.	114	114	114	— ⅞
1600	Budl Mach.	51¾	49	51¾	+ 4
1400	Bullard M.T.	47½	46⅜	46⅜	— ¾
500	C. G. Spring	11⅞	11⅛	11⅛	+ ⅛
100	Cat'piller T.	77	77	77	....
4000	Checkercab	50⅜	47⅜	50½	+ 2⅜
2800	Cities Serv.	89⅞	89	89⅝	+ ⅛
300	Cit. Serv. pf.	97⅞	97¾	97¾	— ⅛
200	Doehler D.C.	37⅛	37⅛	37½	+ ⅛
2100	Durant Mot.	16¾	15⅝	16⅛	+ ⅛
300	Ev. Aut. Ld.	60⅜	59⅜	60⅜	+ 1⅛
200	Fageol Mot.	6⅝	6½	6⅝	+ ⅛
400	Fiat	15¾	15⅝	15¾	+ ⅛
175	Firestone	242¾	242	242¾	— ⅜
100	Firestone pf.	110½	110½	110½	+ ½
1070	Ford Canada	705	671	674	—61
100	Hall Lamp	26¼	26¼	26¼	....
100	Perfect Cir.	59	59	59	+ ¼
100	Raybestos	72	72	72	....
100	Ross Gear	51	51	51	....
800	Serv-el Inc.	15⅜	15	15¼	+ ¼
600	Sparks With.	166½	163	163	— 6
700	Stutz Motor	24⅞	24⅞	24⅝	— ¼
5200	Tim. Det. Ax.	34⅝	32⅛	32⅛	— ⅞
400	U.S. Asbestos	50	49⅝	50	— ⅛
1200	Watson, J.W.	11½	10⅞	10⅞	— 1¼
200	West Auto.	59⅜	58⅝	59⅜	— 1⅜
600	Wire Wheel	29⅜	29⅜	29½	....
450	do B	60	59	60	
3300	Houdaille A	62	60	62	
2000	do B	62	60	62	
10	Midland Steel	104	104	104	
100	Mohawk Rubber	60	60	60	
20	Perfect Circle	59	58¾	58¾	
20	Pines W. F.	185	185	185	
50	Rich Tool	35¾	35¾	35¾	
50	do pf	38½	38½	38½	
200	Ross Gear	49	49	49	
650	Van Skiln	35	35	35	
50	Wayne Pp pf.	43	43	43	

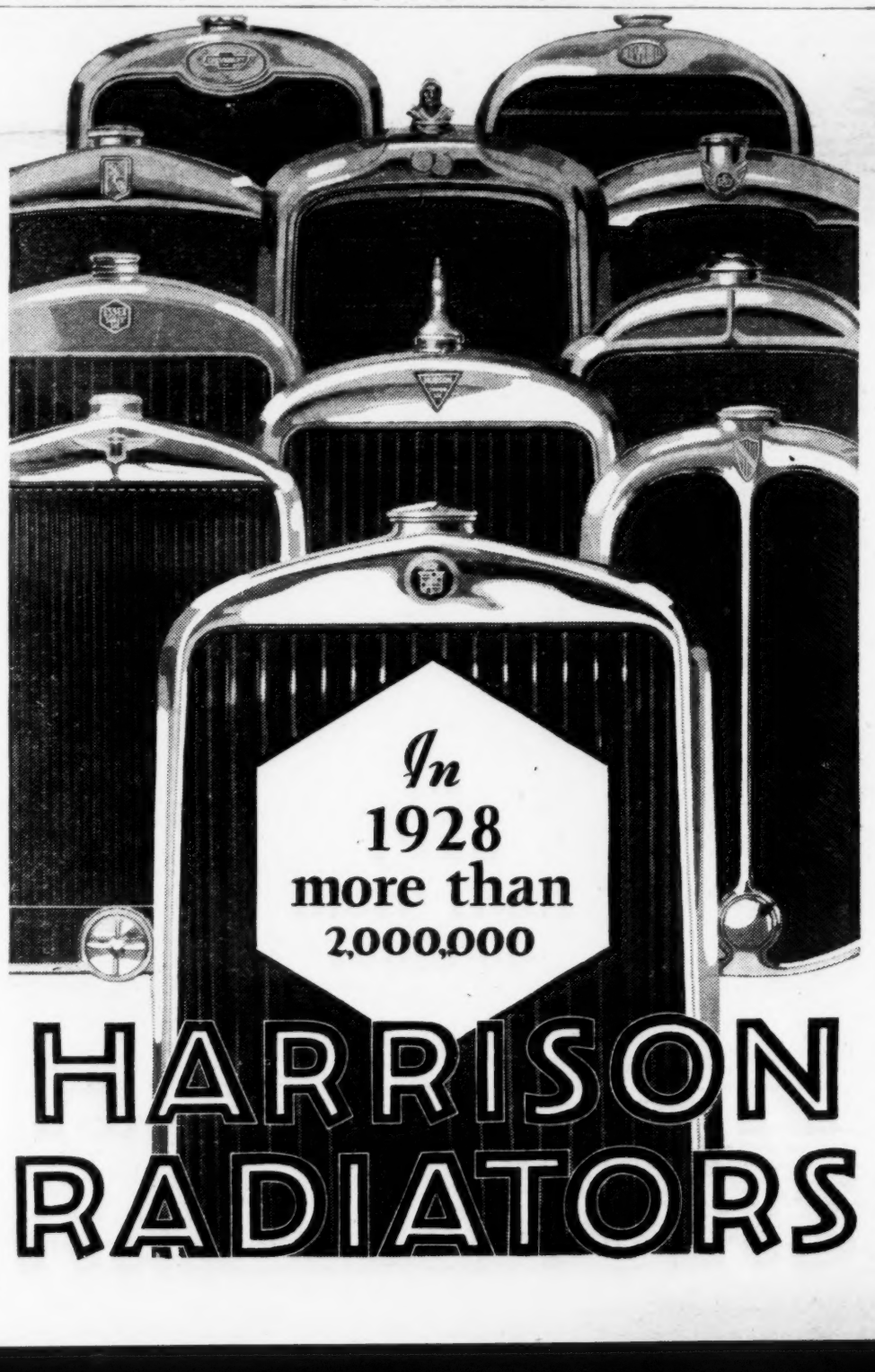
CLEVELAND

Sales		High	Low	Last
2	Akron Rubber	23½	23½	23½
5	Falls Rubber	5½	5½	5½
620	Firestone 7s pf.	110⅞	110¼	110¼
120	India Tire	39	39	39
110	Jaeger Machine	44	44	44
5	Miller Rubber pf.	82	82	82
30	Mohawk Rub pf.	81	81	81
5	Murray Ohio Mo.	43	43	43
15	Packard Electric	124½	124½	124½
200	Seiberling Rubber	61	60⅝	61
125	F B Stearns	5¼	5⅛	5¼

DETROIT

Sales		High	Low	Last
150	Auto Fan	14¼	14¼	14¼
1745	C G Spring	11	10¾	11
925	Detroit Motor Bus	9¼	9¼	9½
900	Federal Mogul	28½	28	28½
160	Ford of Canada	725	670	670
485	G R Metal	15	14½	14½
1560	Hall Lamp	26	25¾	25⅝
540	Hayes Body	57	56½	56½
650	Lakey	31⅛	31½	31½
420	Michigan Steel	82	81¾	82
145	Rich Tool B	35	35	35

CHICAGO

Sales		High	Low	Last
1650	Auburn Auto	138½	137½	138½
13300	Bendix Corp	125	122½	124
6750	Borg-Warner	144½	142	143
59	do 7s pf	102⅝	102⅜	102⅜
100	Hershey A	60½	60½	60½

(The above tables show Wednesday's automotive stock movements, complete.)